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APPROVAL SHEET

Title of Thesis: Domestic Violence Prior to and During
Pregnancy within a Selected Military
Population and its Relationship to
Depressive Symptomatology

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ABSTRACT

Title of Thesis: Domestic Violence Prior to and During
Pregnancy within a Selected Military
Population and its Relationship to
Depressive Symptomatology

Loretta Jean Cepis, Master of Science, 1996

Thesis directed by: Phyllis Sharps, Ph.D., R.N.

Assistant Professor

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Domestic violence is a social problem of epidemic proportions which adversely effects the health of millions of women each year. Abuse does not cease when a woman becomes pregnant. In fact, violence may begin or escalate during the prenatal period. An extensive review of the literature reveals that the prevalence of abuse during pregnancy ranges from 1.5% to 23%. Despite documentation of the prevalence of abuse during pregnancy in the civilian population, a prevalence study has not been conducted in the military community. A preliminary descriptive study was performed at two military hospital clinics, in order to investigate the prevalence of domestic violence prior to (within the last year) and during pregnancy and its relationship to depressive symptomatology. Research on domestic violence discloses that it is a problem that permeates all ethnic, racial, and religious groups, all

socioeconomic and educational levels, and all trades and professions. It is assumed that the military is not immune from domestic violence and that its prevalence is comparable to that in the civilian community. A Women's Pregnancy Well-Being Assessment Survey was distributed to 317 prenatal patients at these facilities between 20 November 1995 and 5 January 1996, until a sample size of 298 participants was obtained. The participants revealed that 3.4% had been abused during the current pregnancy, and that 9.4% had been abused prior to (within the last year) or during the current pregnancy. A significant difference was found between abused and nonabused participants and total scores on the Beck Depression Inventory ($t = -5.23$, $p = .000$). Abuse was significantly correlated with depressive symptomatology ($r = .2931$, $p = .000$).

DOMESTIC VIOLENCE PRIOR TO AND DURING PREGNANCY WITHIN A
SELECTED MILITARY POPULATION AND ITS RELATIONSHIP TO
DEPRESSIVE SYMPTOMATOLOGY

by
Loretta J. Cepis

Thesis submitted to the Faculty of the Graduate School
of the University of Maryland in partial fulfillment
of the requirements for the degree of
Master of Science
1996

PREFACE

The views expressed in this publication are those of the author and do not reflect the official policy or position of the United States Air Force, Department of Defense, nor the U. S. Government.

DEDICATION

I would like to dedicate this endeavor to all of the women who took the time to participate in this study. Thank you for giving me more than I gave in return. Not only did you complete the surveys, but you shared your stories and provided encouragement along the way. Many said "this isn't a problem in my relationship, but if it will help others I will be more than happy to complete it."

Finally, to the women who had the courage to self-report abuse.....I hope that the strength of your actions will provide hope for you and for others in similar situations, and that your courage will highlight the issue of domestic violence in our community.

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I would like to extend a "heartfelt" thanks to the many individuals behind the scenes who assisted me with this immense undertaking.

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To Beth W. Gering, my fellow graduate classmate and comrade in this endeavor, it was a tremendous learning experience for both of us.....I hope this is the first of many collaborative efforts to come.

To my daughter Ashley.....for all her love, laughter, and patience during this process, and who at the age of five is writing her own thesis on the behavioral patterns of mothers involved in research!!!

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CHAPTER I

Introduction

Background of the Problem

Domestic violence is a social problem of epidemic proportions which adversely affects the health of millions of women each year. More than 1.8 million women in the United States suffer from physical abuse inflicted by their spouse or significant other (Bachman, 1994; Hamberger, Saunders, & Hovey, 1992; Straus & Gelles, 1990). It is a problem that is personal in nature and has been largely hidden from public view. Until recently, society had adopted the philosophy of *out of sight out of mind*. But society has begun to recognize domestic violence as a major health issue that can no longer be ignored.

In the past violence against women was overlooked not only by the general population but by health care professionals as well. However, what was once hidden has begun to emerge from behind closed doors. Society has begun to acknowledge the reality of abuse and respond to its victims. Many professional organizations have stepped forward to recognize violence against women and its sequelae as a major health issue that needs to be immediately addressed. The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) has mandated compliance to standards for the care of victims of spousal abuse and the provision of training for health care providers regarding identification, documentation, treatment, and referral

procedures (1992). The Healthy People 2000 initiative identified the need to develop policies to address the critical health problems of violence against women (U. S. Department of Health and Human Services, 1990). In 1994, the Violent Crime & Law Enforcement Act was passed by Congress. One of the major tenants of the Act is the prevention and study of violence against woman. The American Nursing Association (ANA) and the Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN) both support research, advocacy, policy, and legislation designed to focus on the issues of domestic violence.

Societal Myths and Assumptions

Walker (1979) characterized the societal perception of an abused woman as a frail washed out person, with several young children, no education or job skills, poor, and from a minority group. Domestic violence is one of many crimes against women that is veiled in myths. Walker recounted twenty-one myths surrounding the abuse of women. The myths perpetuate the mistaken sentiment, as do those presented by Gelles (1975) to some extent, that the victim is responsible for the perpetration of the crime. The myths suggest the following characteristics about abused women:

1. Only a small percentage of the population is affected by abuse.
2. Abused women are masochistic.
3. Abused women are crazy.

4. Women of lower socioeconomic status are abused more frequently and more severely than abused women of middle socioeconomic status.

5. Women of minority groups are battered more frequently than those from non-minority groups.

6. Religious beliefs will prevent abuse.

7. Abused women are uneducated and lack job skills.

8. Abused women deserve to get beaten.

9. Abused women can always leave the situation.

In 1987 Helton described five general societal assumptions that were believed with regard to abuse: (a) abuse is a private matter; (b) only a small number of women are abused; (c) abuse only occurs to those of a lower socioeconomic status; (d) abuse is due to a behavioral problem that cannot be altered; and (e) if a woman is abused she must have done something to bring it upon herself. Although these assumptions are not accurate they were and continue to some extent to be believed by many.

Abused pregnant women have been all but invisible in society in part because of historical myths, and a contemporary societal view of pregnancy that is romantic and ideal. Statistics, however, indicate that pregnancy for an increasing number of women is all but ideal (Noel & Yam, 1992, p.871).

Abuse of women, in particular pregnant women, has become a major focus in health care today. It is a problem that permeates all "races, religions, educational levels,

socioeconomic groups, and cultural backgrounds" (Greenberg, 1994, p. 56).

Reviews of recent studies reveal that the prevalence of abuse during pregnancy ranges from 1.5% to 23% (Amaro, Fried, Cabral, & Zuckerman, 1990; Anderson, McFarlane, & Helton, 1986; Bullock & McFarlane, 1989; Campbell, Poland, Waller, & Ager, 1992; Gelles, 1975; Helton, 1986; Helton, McFarlane, & Anderson, 1987a, 1987b; Helton & Snodgrass, 1987; McFarlane, 1991; McFarlane, Parker, Soeken, & Bullock, 1992; Parker & McFarlane, 1994; Stewart & Cecutti, 1993). McFarlane (1993) more graphically describes "the horror: one in six pregnant women is abused during pregnancy" (p. 353).

Helton (1987) defines abuse as including five types of interpersonal violence: physical, sexual, property, psychological, and social. Prevention focuses on efforts targeted at lessening the incidence and severity of abuse. We must bring to the forefront the epidemic proportions of abuse; we can no longer pretend that it does not exist. King, et al. (1993) stated that assessment techniques and the exposure of abuse are essential strategies to prevent and minimize the severity of abuse.

Domestic Violence in Pregnancy

Pregnancy is considered by most a joyous time, the couples' efforts are directed towards the successful outcome of a healthy baby. The father of the child is probably the most important of those persons who form the pregnant

woman's circle of significant others. In an ideal world, the father supports his partner through the journey of pregnancy. However, this is not the case for all couples. Abuse for some women is a continuation of what happened prior to pregnancy, while for others it is during pregnancy that they first encounter abuse (Amaro, et al., 1990; Berenson, Stiglich, Wilkinson, & Anderson, 1991; Helton, et al., 1987b).

Why in pregnancy? Society, mistakenly thinks that a woman is safe from abuse during pregnancy. Research demonstrates this is not the case. Pregnancy has been frequently linked with an increase in abuse (Berenson, et al., 1991; Gelles, 1988). Why does abuse occur during pregnancy? As early as 1975, Gelles attempted to answer this perplexing question. He discovered that 22.7% of the women interviewed, reported abuse during pregnancy. Gelles (1975,1987) proposed five contributory factors as motives for abuse during pregnancy: (a) sexual frustration; (b) family transitions; (c) biochemical changes in the pregnant partner; (d) prenatal child abuse; and (e) the defenseless nature of the pregnant partner. In some instances it would seem that Gelles' elucidation of abuse in pregnancy places the burden of responsibility on the woman and her actions. Thus, implying that the woman's (the victim's) behavior and responses in pregnancy were contributing factors to the abuse.

Walker (1979) identified pregnancy as one of three distinct periods in which there is an increase in abuse. Walker postulated that abuse may occur or increase in pregnancy due to several factors including: loss of attention, attention which was once focused on the partner is now directed toward the baby; a partners attempt to stop the proliferation of his bad genes; and simple prenatal child abuse.

In 1993, Campbell, Oliver, and Bullock attempted to reexamine possible answers to this question. Women who retrospectively reported being abused during pregnancy (n = 24) were asked to examine why they thought the abuse occurred. The following themes emerged from their responses: (a) jealousy toward the unborn child; (b) pregnancy-specific violence that was unrelated to fetus; (c) anger directed toward the fetus; and (d) anger towards the pregnant partner or 'business as usual'. Campbell et al. concluded that for most women, abuse was a component of their relationship whether they were pregnant or not. Unlike Gelles (1975, 1987), Campbell et al. assert the primary responsibility for abuse during pregnancy to the violent man as opposed to the pregnant woman.

Perinatal impact. Domestic violence during pregnancy occurs with sufficient frequency that it poses major health implications for the pregnant woman and her fetus (Bullock, McFarlane, Bateman, & Miller, 1989; Newberger, et al., 1992). Campbell (1986) postulated that pregnancy was

associated with an increased severity and frequency of abuse, and a factor for an increased risk of homicide. Many abused women have reported miscarriages, stillbirths, and preterm deliveries in addition to physical injuries as a result of a battering episode. However, few clinical research studies have been conducted to study the effects of battering during pregnancy on mother and fetus. The literature theorizes possible perinatal effects of physical abuse as spontaneous abortion, therapeutic abortion, abruptio placenta, low-birth-weight infant, fetal injury, preeclampsia, preterm labor, preterm delivery, hemorrhage, impaired bonding, and delayed postpartum recovery (Bullock et al., 1989; Helton, 1986; McFarlane, 1989; Newberger, et al. 1992; Parker & McFarlane, 1991; Schei, Samuelsen, & Bakketeig, 1991).

The health care profession places a high value on the research, diagnosis and treatment for improving pregnancy outcomes of women who experience pregnancy induced hypertension (PIH), preterm labor (PTL) gestational diabetes (GDM), abruptio placenta, and placenta previa. Ironically, the highest incidence of conditions combined is approximately 13% (Bohn & Parker, 1990), whereas the prevalence of domestic violence in pregnancy ranges from 1.5 to 23% (Amaro, et al., 1990; Anderson, et al., 1986; Bullock et al., 1989; Campbell, et al., 1992; Gelles, 1975; Helton, 1986; Helton, et al., 1987a, 1987b; Helton & Snodgrass, 1987; McFarlane, 1991; McFarlane, et al., 1992;

Parker & McFarlane, 1994; Stewart & Cecutti, 1993).

According to Bohn and Parker (1990) domestic violence in pregnancy must be regarded by health care providers as a "serious public health problem requiring the same vigilance currently afforded to gestational diabetes and preeclampsia" (p. 156).

In a cohort study, Schei, Samuelsen, and Bakketeig (1991) compared the pregnancy outcomes among women exposed to abuse (index, $n = 66$) with the outcomes among women not living in a physically abusive relationship (control, $n = 114$). The index cohort experienced more spontaneous abortions, 16.1% versus 9.6% ($p < .05$). The mean birth weight was significantly lower in the index cohort as compared with the control cohort, 3329 grams versus 3482 grams ($p < .05$). Although not statistically significant, the proportion of infants below 2500 grams was also higher. Again, although not statistically significant, the occurrence of complications in pregnancy (preeclampsia, hemorrhage, premature labor, and hospital admission) were reported more frequently in the women exposed to an abusive relationship.

In an attempt to determine the prevalence of physical and sexual abuse and to determine the effect of abuse on infant birth weight Parker, McFarlane, and Soeken (1994) conducted a prospective study of adult and teenage women. A total of 1,203 pregnant women (356 teens, 847 adults) were interviewed in public prenatal care clinics at the first

prenatal visit. The participants were assessed for subsequent abuse during the second and third trimesters. The instruments used in the interview were the Abuse Assessment Screen and the Index of Spouse Abuse. In addition, the Danger Assessment Screen was administered to those women who disclosed abuse. Infant birth data was collected by record review. The results of the study indicated that abuse during pregnancy was reported by 20.6% of the teens and 14.2% of the adult women. Teens had a significantly higher rate of abuse in pregnancy ($p < .01$). In both groups those abused during pregnancy tended to enter prenatal care later in their pregnancy. For the total sample abuse during pregnancy was a significant ($p < .05$) risk for low birth weight, as well as low maternal weight gain, infections, anemia, smoking, and use of alcohol or drugs.

Berenson, Wiemann, Wilkinson, Jones, and Anderson (1994) compared the perinatal outcomes of 32 women who reported physical abuse during pregnancy with those of 352 women who denied a history of abuse. Between the two groups, there were no differences in age financial status, employment status, level of education, use of alcohol, gestational age at time of entry to prenatal care, prevalence of anemia, or mean weight gain. Bivariate analysis of perinatal outcomes reflected that those women physically abused during pregnancy were 2.2 times more likely to have chorioamnionitis and 1.9 times more likely to encounter

preterm labor than those not abused. Using multivariate analysis and controlling for confounders, victims of abuse were still 2.3 times more likely to experience preterm labor. There were no confounders identified for the relationship between chorioamnionitis and abuse.

Within 24 hours of delivery 589 women, in both public and private hospitals, were interviewed by a nurse to determine the prevalence of abuse, and the use of alcohol and tobacco during pregnancy (Bullock, & McFarlane, 1989). Data was also collected from each woman's obstetrical admission history, and the labor and delivery record. Gestational assessment, sex of the infant, birth weight, Apgar scores, type of delivery, antepartal complications, treatment for preterm labor, and the condition of the infant at delivery were recorded. The results revealed that significantly ($p < .02$) more abused women (12.5%) delivered low birth weight infants than nonabused women (6.6%). Controlling for variables (race, use of tobacco and alcohol, prenatal care, prior abortions, maternal complications, and specific hospital), separately and simultaneously, there was a significant ($p < .05$) correlation between physical abuse and low birth weight.

Mental health impact. Domestic violence has been described as an important risk factor for psychiatric illness (Koss, 1990). Although domestic violence is not a new phenomenon, it has only been over the last two decades that the psychological consequences have been extensively

studied (McClennan, Joseph, & Lewis, 1994). Although a preponderance of researchers have preferred to study the more apparent physical consequences of domestic violence rather than the more elusive psychological and emotional outcomes, several studies (Adams-Hillard, 1985; Campbell, et al., 1992; Stewart, 1994; Stewart & Cecutti, 1993) have described domestic violence as having a significant impact on psychological well-being.

A study by Adams-Hillard (1985) suggested that women who had been abused were significantly more likely than nonabused women to have experienced psychological problems. Forty-three percent of the abused women were found to have psychological problems, while nonabused women had a 5% incidence of psychological problems. Additionally, women who experienced abuse were more likely to visit a physician for emotional problems, have been prescribed psychotropic drugs, to experience severe depression, or been hospitalized for psychiatric illness. The researchers recommended that women who present with psychosomatic symptoms should be questioned about the possibility of physical abuse.

It is important to consider carefully how abuse and subsequent depressive symptomatology resulting from abuse impacts on the lives of such women. Recent studies indicate that the prevalence of depression among abused women ranges from 36% to 83% (Campbell, et al., 1992; Cascardi & O'Leary, 1992; Gleason, 1993; West, Fernandez, Hillard, Schoof, &

Parks, 1990). We must be cognizant of the mental, as well as the physical health needs of the battered pregnant woman.

Economic impact. As previously discussed the perinatal impact of domestic violence in pregnancy can incur additional costs whether it is for the treatment of prenatal or neonatal complications. However, an extensive review of the literature revealed minimal economic information on the health care costs of domestic violence in pregnancy. The following limited number of studies speaks to the increase in health care cost related to domestic violence. Rice and MacKenzie documented that injuries to women caused by interpersonal violence that required hospital admittance cost an estimated \$80 billion in 1989. In a study by Helton, et al. (1987a), one-third of the women battered during pregnancy sought medical attention for injuries sustained from abuse. To conclude, there is the potential for increased expenditure for the treatment of the injuries to the abused pregnant women, as well as the obstetrical and neonatal complications associated with domestic violence.

Depressive symptomatology may also have economic ramifications. Undiagnosed patients with depressive symptomatology are frequent utilizers of health care. Persons with depressive disorders utilize outpatient health care facilities three times more frequently than all other users (Helton, 1987; Zung, Broadhead, & Roth, 1993). The frequent use of health care facilities related to depressive symptomatology also comes at an increased cost.

Rationale for the Study

Despite documentation of the prevalence of abuse during pregnancy in the civilian community, there is a lack of documentation of the prevalence of abuse during pregnancy in the military community. The individual branches of the Armed Forces are required to report all cases of domestic violence. In most cases, these numbers only represent incidents of abuse in which the offender was formally charged with abuse.

In 1981, the Department of Defense (DoD) issued a policy directive, Family Advocacy Directive 6400.1, which mandated that each branch of the Armed Forces broaden their existing programs in the area of child abuse to also include the evaluation, prevention, and treatment of spouse abuse. Many programs were established without performing a formalized prevalence study in the military community, instead data from previously substantiated cases was used. Most domestic violence programs were initiated using protocols and standards based on research findings conducted in the civilian community. There has been no systematic evaluation of these domestic violence programs to determine if they are appropriately serving the needs of the military population?

Like the general population, the military has begun to acknowledge that domestic violence does exist within its community and is prepared to enact research to better understand this major health issue. Former Navy Surgeon

General, Vice Admiral Hagen (1995) listed Women's Health Issues as one of Navy Medicines top ten priorities. The 1995 Tri Service Nursing Research Group (Miller, 1995) identified the need to expand the knowledge base of military nursing practice in the area of Spousal/Child Abuse and classified it as one of the highest priorities for nursing research.

Despite what one may think, abuse does not cease when a women becomes pregnant. In fact, violence may either begin or escalate during the prenatal period. Domestic violence in pregnancy occurs in all communities, in all racial, ethnic, socioeconomic groups, and among married as well as unmarried couples (Walker, 1979). Domestic violence in pregnancy has been more extensively studied in the civilian community, the military community has been slow to sanction research in this area. To date, no published research exists on the prevalence of domestic violence in pregnancy within the military population. As health care providers we must be prepared to actively investigate domestic violence during pregnancy within our communities and to develop programs based on our research findings.

In many military occupations a high value is placed on service members who are independent, assertive, and always in control. Does this conditioned environment impact upon the relationships they share with intimate female partners, particularly during pregnancy? Additionally, how does abuse during pregnancy impact on a woman's mental health, specifically the manifestation of depressive symptomatology?

The horse may have come before the cart and therefore, it is necessary to determine the prevalence of abuse of pregnant women and the correlate of depressive symptomatology before the enactment of additional protocols, policies, or procedures.

Purpose of the Study

The purpose of this preliminary study was to identify methods to document the occurrence and magnitude of domestic violence, and to describe various characteristics and conditions of abuse during pregnancy within the military community. The study also, sought to determine if there was a relationship between domestic violence in pregnancy and depressive symptomatology.

Research Questions

The research questions were:

1. What is the prevalence of self-reported abuse among pregnant women within a specific military population?
2. What are the characteristics associated with self-reported abuse in pregnancy within a military population (military rank, deployment status, and location of residence)?
3. What are the demographic differences between those who self-report abuse and those who do not report abuse within this population (race, maternal age, level of education, socioeconomic status, marital status)?

4. Is there a relationship between depressive symptomatology and self-reported abuse in military health care?

Definition of Terms

The two concepts to be studied in this research project are domestic violence and depression. These concepts will be examined in the study population of pregnant women receiving care in military outpatient clinics. The concepts are defined as follows:

1. Domestic Violence - is any threat, overt or covert act or series of acts occurring between two individuals who live or have lived together that is intended or perceived to be intended to cause physical or psychological harm. This study will focus on abuse as physical harm and the potential psychological impact from that harm.

2. Depression - is a syndrome that is a complex of symptoms. It can be indicated by dysphoric mood or loss of interest or pleasure in all or almost all usual activities or pastimes (Shaver, & Brennan, 1991). The complex of symptoms includes: (a) poor appetite or significant weight loss (when not dieting), or increased appetite or significant weight gain; (b) insomnia or hypersomnia; (c) psychomotor agitation or retardation; (d) loss of interest or pleasure in usual activities, or decrease in sexual drive; (e) loss of energy, fatigue; (f) feelings of worthlessness, self-reproach, or excessive or inappropriate guilt; (g) diminished ability to think or concentrate; and

(h) recurrent thoughts of death, suicidal ideation, wishes to be dead, or suicide attempt (American Psychiatric Association, 1987). The aim of this investigation is the identification of depressive symptomatology, not the diagnosis of depression.

Assumptions

This study was based on the assumption that the military is not immune from domestic violence and that the prevalence is comparable to that of the civilian community. It is also assumed that domestic violence occurs more frequently than is actually reported to the Armed Forces Registry. In addition, an underlying assumption is that the participants will self-report abuse.

Limitations

The main goal of this study was to investigate the prevalence of domestic violence in a selected military population. As a pilot study, it is the first step in gaining insight into the prevalence of this problem so that further research can be instituted and that appropriate resources can be mobilized. It is not the intention of this preliminary study to generalize the results to the entire military population. The limitations to this preliminary study included but are not limited to the following:

1. J. McFarlane (personal communication, August 10, 1995) author of the Abuse Assessment Screen recommended that an interview format be utilized as opposed to a survey (see Appendix A). McFarlane (1991) compared self-report of abuse

with face to face health care provider (nurse) assessment using the Abuse Assessment Screen. Seven percent of the women self-reported physical abuse on a medical history form (n = 477). When the same abuse assessment questions were asked by a nurse, 29% revealed physical abuse (n = 300). In regard to abuse in pregnancy, 1.5% self-reported physical abuse, while 8.3% reported abuse in pregnancy during a nurse interview.

However, assessing for abuse via interview carries the responsibility for intervention after a positive response. Intervention in this case was mandated to include the reporting of the abuse to the appropriate community and military authorities. Among the military community, the fear of military reprisal may preclude the woman from disclosing abuse. The Department of Defense Victims Survey Preliminary Report (1994) revealed that seventy-five percent (n = 477) of the victims of abuse in the military were hesitant to report abuse for fear of military reprisals to their spouse. The purpose of this preliminary study was to determine the underlying prevalence of abuse, therefore an anonymous survey format was selected because it was believed that this format would increase the likelihood of women self-reporting abuse in a military population.

2. The small sample and the use of only two military sites (convenience sampling) may bias results and decrease generalizability to a larger population. The two sites used are not assumed to be representative of the larger military

population of active duty military members and their families

3. The proposed research is a preliminary study performed within a military population. One of the primary focuses of this research is to obtain information for improving the survey format and assessing the adequacy of the outlined methods so that future research may be enhanced. As stated in item one it is acknowledged that the use of the survey format to elicit self-reports may result in greater underreporting of abuse.

4. In determining how abuse prior to and during pregnancy may impact upon a woman's perceived mental health status; it is not the intent to attribute causality of depressive symptomatology. It is merely to determine if a relationship between abuse and depressive symptomatology exists. Without a determination of preexisting mental health status prior to abuse, self-reported depressive symptomatology cannot be attributed to abuse.

Summary

Physical violence against women is widespread, but often hidden by society. Abuse is recurrent and often begins in pregnancy (McFarlane, 1993). Domestic violence in pregnancy has far reaching impact on perinatal, psychological, and economical health and well-being of the mother, fetus, and neonate. Although there may be limitations to this investigation, research of this type is needed in the military population. It is acknowledged that domestic

violence exists, but there is no formal research that explores the prevalence of domestic violence in pregnancy within a military population. According to Campbell (1993), we need to "address the gap in our knowledge in terms of the most pervasive form of violence against women: woman abuse" (p. ix). It is the intent of this research to document the prevalence of abuse in pregnancy in this population. Also, the findings will be utilized to increase the awareness of the existence of domestic violence within the Armed Forces and to begin the foundation to establish appropriate resources to assist pregnant women in this population.

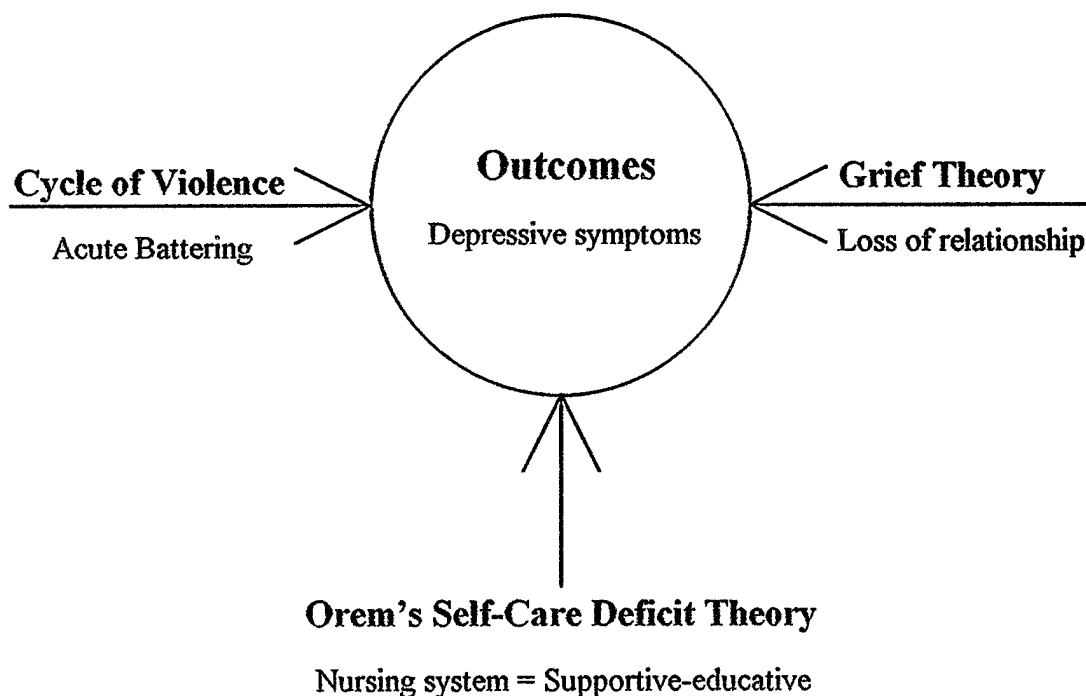
CHAPTER II

Literature Review

The cycle of violence, grief theory, and Orem's self-care deficit theory provide the conceptual framework for this investigation (see Figure 1). A review of the literature explores the prevalence of abuse in both the civilian and military populations, and examines depressive symptomatology as a correlate of abuse in both gravid and nongravid women.

Conceptual Framework

Figure 1. Schematic of conceptual framework.



Cycle of Violence

An awareness of the cycle of violence is necessary in conceptualizing the abuse process. It is important to comprehend the cycle of violence and its accompanying coping strategies in order to prevent and hopefully stop the violence committed against women. As described by Walker (1979) the cycle of violence has three distinct phases: the tension-building stage, the acute battering incident, and the kindness and contrite loving behavior phase. The phases vary in time and intensity within an individual relationship and also vary among relationships. There is no predictability in how long a couple will remain in any one phase nor in how long it will take to complete a cycle.

Tension-building. This phase is typified by minor physically abusive incidents, a gradual escalation of tension as a result of minor irritations and arguments; and increased isolation/immobilization characterized by signs of anxiety, low self-esteem, symptoms of depression, and dependence. An attempt is made to placate the abuser and restore equilibrium by nurturing, compliant behavior and staying out of his way. The abused woman may resort to denial and rationalization of the abuser's behavior. She may also blame external factors such as work stress or alcohol for the abuser's behavior, thereby sustaining the denial of the abusive behavior. Denial is used as a coping mechanism in the belief that the abusers behavior will

improve (Bohn, 1990; Helton, & Snodgrass, 1987; Walker, 1979).

The tension-building phase in many relationships may last for long periods of time, but as irritations increase in intensity and frequency it becomes more difficult to use successful coping skills. Attempts to change the increasing pattern of violence become ineffective. Once the tension exceeds coping ability, the second phase ensues (Walker, 1979).

Acute battering incident. Phase two is usually briefer, lasting approximately two to twenty-four hours. Phase two is marked by an explosive discharge of tension that has compounded during phase one. The explosive event is depicted by hitting, slapping, kicking, choking, use of objects or weapons, as well as verbal and sexual abuse. Lack of predictability, lack of control, and the explosiveness of the incident differentiate this phase from the minor incidents which occur in phase one. However, this lack of control does not mean to imply that the abuser is not aware of the inappropriateness of his actions. Foreboding of what is to come often causes the women to act out her fears in psychophysiological symptomatology such as anxiety, depression, eating disorders, and sleeping disorders (Walker, 1979).

The violent incident is usually triggered by an external event or the internal psychological state of the man. Rarely is the trigger the woman's behavior, although

occasionally the woman will unconsciously provoke the incident. She may instigate the explosive event in order to maintain some control over when the incident occurs, knowing that a period of calm will follow (Bohn, 1990; Walker, 1979).

The acute violent episode is followed by initial shock, disbelief, and denial. Both partners devise ways in which to rationalize and minimize the violence. When the abuse occurs early in a relationship it is often dismissed as an isolated incident. With subsequent abuse, early in this phase the woman may experience fear, hate, or anger. Then, in a state of shock much like an accident victim, she may wait days to seek treatment for her injuries unless severely injured (Bohn, 1990; Silverman, 1981). This same numbness and listlessness may be why she is also not able to seek assistance from other sources as well. Bohn (1990) asserts "the initial numbness may be followed by rationalization, self-blame, denial, or repression" (p. 91). The woman as in phase one may site the onus as something outside the relationship (external factors).

Kindness and contrite loving behavior. Unlike the savageness of phase two, phase three is embraced by both partners. This phase is characterized by a period of calm during which time reconciliation occurs, the perpetrator displays kind, repentant, loving behavior. He is extremely remorseful, apologetic, and convincing that he will never

hurt her again. He will promise the moon and take action to convey his sincerity (Walker, 1979).

It is very early in this phase that the woman may choose to leave. Their feelings of fury and fear may help to motivate them to make the necessary changes in their lives. But, the batterer is persistent in his solicitations and his engagement of others to aid in his plea that he will never do it again. The abused woman wants to believe that she will never be abused again. She often chooses to be convinced that the behavior he depicts during this honeymoon phase is what love is all about and that this is what he is really like. There is no distinct end to this phase, the honeymoon phase slowly gives rise to the tension buildup of phase one (Walker, 1979).

As phase one recurs, the cycle is repeated. "Over time, as the cycle is repeated the tension-building phase lasts longer, the violence is more frequent and severe, and the period of loving calm may decrease or disappear" (Bohn, 1990, p. 92). Helton (1987) describes the effects of violence over time on women as increased isolation, decreased self-esteem, depression, increase in the abuse of drugs and alcohol, morbidity (temporary and permanent), and mortality.

Throughout the phases of the cycle of violence it is evident that depressive symptomatology exists. This is not to say that all abused women are clinically depressed, but that depressive symptomatology is frequently a consequence

of the cycle of violence. A conceptual basis for the occurrence of depressive symptomatology is founded in grief theory, in that the existence of depressive symptomatology stems from the loss of a relationship.

Grief Theory

Depressive symptomatology can be associated with considerable impairment in functioning comparable to and at times worse than that for patients with chronic illnesses (Wells, et al., 1989). Epidemiological studies show that there is a preponderance of depression in women (Kizilay, 1992; Paykel, 1991; Weissman, & Klerman, 1977). The most common causes of depressive symptomatology in females as described by Silverman (1981) are related to the losses women experience. Silverman specifically addresses the abused woman as one who has suffered a loss, the loss of the dream of romantic love or the idealized relationship. The recurrent correlate of depression in women who have experienced violence may be clarified as a reaction to the loss (potential or anticipated) of a relationship (Campbell, 1989).

Campbell (1989) evaluated the explanatory applicability of the grief model for responses of women experiencing violence. This research compared 97 battered women with 96 nonbattered woman who like the battered women were having problems in an intimate relationship with a man. The grief model explained 48.9% of the variance in depression and

stress-related physical symptoms (grief index) for abused women.

For the abused woman depressive symptomatology as related to grief begins with a consequential loss by deprivation and ultimately involves change in a relationship and in self-image. Such changes can be viewed as a critical transition. A critical transition is characterized by an event which poses serious problems when coping skills are inadequate, and it involves a period of time that can be divided into phases. The phases of transition as depicted by Silverman (1981) are impact, recoil, and accommodation.

Impact. During the impact phase the individual is in a state of shock, unable to believe what has happened, confused and disoriented. This phase is characterized by the numbness and bewilderment she is experiencing. The abused woman attempts to maintain equilibrium as if nothing has happened, not wanting to believe that a variance has occurred and that further change is necessary. Aided by the protectiveness of this shock state the abused woman may continue to perform reflexively. She wants and needs to believe that the abuse was an isolated incident even though it may have occurred repeatedly in the past (Silverman, 1981). There is no way to determine how long this phase of the grieving process will last, women may for many years avoid the reality of their loss.

Recoil. The second stage, recoil, is typified by a "growing recognition of the reality of the change which

arises from the frustration and tension involved in the attempt to continue to operate as though no change had occurred" (Silverman, 1981, p. 27). It is in this phase that the classic symptoms of grief both physiologic and psychologic (i.e. sadness, sense of emptiness, helplessness, shame) are acute, it is the persistence of these symptoms that may be associated with subsequent depression. It is at this point that the abused woman can become stagnated in her grief.

Accommodation. In the accommodation phase the individual is said to find a new route on the road to a new identity. If she is to embark on a new life she will need to discover inner strengths and practical information from a supportive network. The abused woman must acquire a new faith in herself, refurbish her confidence that has been weakened through the abuse inflicted by her partner and society's indifference. In addition to the loss of the dream of an ideal relationship, abused woman also experience the loss of self-esteem which has been damaged not only by the abusive partner, but by "social attitudes which deny the legitimacy of their grief" (Silverman, 1981, p. 32).

To complete the conceptual framework of this research the application of Orem's self-care deficit theory is utilized as the basis for nursing assessment and intervention as related to the cycle of violence and consequential depressive symptomatology. Orem's theory for nursing practice substantiates the need for assessment of

abuse and subsequent depressive symptomatology, and for the validation of the victim's grief as it pertains to the loss of a relationship.

Orem's Self-Care Deficit Theory

Orem's (1995) conceptual framework for nursing provides a basis for holistic assessment of the women who has experienced violence and identifies the nurse's function to assist these individuals toward optimal self-care. Orem describes a transformation from passivity and dependency to active participation as the key to successful self-care. Self-care is defined by Orem as:

"learned, goal-oriented activity of individuals. It is behavior that exists in concrete life situations directed by persons to self or to the environment to regulate factors that affect their own development and functioning in the interest of life, health, or well-being" (1991, p. 64).

Orem defines self-care deficit as an association amid the "therapeutic self-care demand and self-care agency in which constituent developed self-care capabilities within self-care agency are not operable or not adequate for knowing and meeting some or all components of the existent or projected therapeutic self-care demand" (1991, p. 365).

Power components. The ability to perform self-care is influenced by what Orem calls the ten power components. These components are essential to engage in self-care agency, they are the learned behaviors necessary to take

action to protect oneself from harm. Several components are fundamental to the development of self-care agency in women who have experienced abuse: component number one, the "ability to maintain and exercise requisite vigilance with respect to self as self-care agent and internal and external conditions and factors significant for self-care"; component number six, the "ability to make decisions about care of self and to operationalize these decisions"; component number eight, "a repertoire of cognitive, perceptual, manipulative, communication, and interpersonal skills adapted to the performance of self-care operations"; and component number ten, the "ability to consistently perform self-care operations, integrating them with relevant aspects of personal, family, and community living" (Orem, 1995, p. 221).

Self-care. Orem (1995) labels her self-care deficit theory of nursing as a general theory composed of three related theories. First, the theory of self-care describes and explains self-care. Orem defines self-care agency as the capability to employ actions necessary to care for self. Simply, the ability to care for one's own health. Self-care agency includes the capacity to attend to specific needs and to exclude those deemed not pertinent, the capacity to recognize the need for change and regulation, the ability to make decisions, and the capacity to take action to accomplish change and regulation. It is important to be able to identify the capability of an abused woman to engage

in her own self-care in order to provide appropriate support and intervention.

Self-care deficit. Second, the theory of self-care deficit describes and explains why people can be helped through nursing. Self-care deficit occurs when the individuals ability to perform self-care does not meet the current self-care demand. Limitations render the individual completely or partially unable to care for one's own health. Orem (1995) asserts that nursing intervention is legitimized when a deficit relationship occurs. The abused woman may be unable to maintain her own health care needs and therefore may be helped through appropriate nursing intervention.

Nursing system. Third, the theory of nursing system describes and explains relationships that must be brought about and maintained for nursing to be produced. Nursing systems seek to overcome self-care limitations or deficits by "developing, enhancing, or adjusting skills in self-direction and self-management" (Orem, 1995, p. 177). The outcomes sought by nurses through nursing systems result in the progression to health or well-being.

Orem defined nursing systems as an ongoing sequence that is constructed when nurses combine "one way or a number of ways of helping to their own actions or the actions of persons under care that are directed to meet these persons' therapeutic self-care demands or to regulate their self-care agency" (1985, p.31). Of the three basic nursing systems identified by Orem (1995) wholly compensatory, partly

compensatory, or supportive-educative, the supportive-educative system is the most pertinent to the care of the woman experiencing domestic violence. The supportive-educative system is "for situations where the patient is able to perform or can and should learn to perform required measures of externally or internally oriented therapeutic self-care but cannot do so without assistance" (Orem, 1995, p. 310).

Utilizing the supportive-educative system, women who have experienced violence are able to accept responsibility for their own health via self-care actions and can overcome their limitations through supportive guidance of the nurse (health care professional). The methods of assistance to be incorporated would include supporting, guiding, teaching, and providing a developmental environment (Orem, 1995). The supportive-educative system is the only system where requirements for assistance "are confined to decision making, behavior control, and acquiring knowledge and skills" (Orem, p. 310).

Domestic Violence

Prevalence

Domestic violence in pregnancy is a sensitive issue and one that many health care providers often fail to recognize or acknowledge. However, it is of vital importance that those who do provide care to pregnant women be aware of the extent of the problem. Anderson, et al. (1986); and Helton (1986) interviewed 112 randomly selected women from both

public and private prenatal clinics. The subjects received both a questionnaire and an interview, but the specifics of the instruments used are not described. No details were given as to the direction of the questions in the interview or those on the questionnaire. The author documented 38% of the women surveyed had been abused or were at risk for abuse. Twenty-one percent reported actual abuse, nine percent during there current pregnancy. Six percent reported threats of abuse. Eleven percent demonstrated behavioral signs of abuse, although they denied any abuse on the questionnaire.

In a descriptive study (Helton, et al., 1987a, 1987b; Helton, & Snodgrass 1987), utilizing a sample of 290 women from both public and private prenatal clinics, the prevalence of abuse during pregnancy was assessed with a 19-item questionnaire. The questionnaire consisted of 10 demographic and pregnancy related questions followed by nine questions which focused on abuse. Results of the study revealed that 36% of the subjects had been abused or appeared to be at risk for abuse, 8% of the sample admitted to abuse during the current pregnancy.

In another study, Bullock and McFarlane (1989) identified 120 (20.4%) abused pregnant women from a sample of 589 in both public and private hospitals. Participants in the study were interviewed for approximately one hour by a nurse. The interview questions focused on demographic data, identifying the woman's history of battering, and

determining a history of verbal abuse or threats of physical abuse.

In a prospective study of 1,243 pregnant women Amaro, et al. (1990) assessed the prevalence of abuse.

Sociodemographic characteristics of the sample reflected the population served at the clinic utilized (predominantly low income, and of ethnic minority). Participants in the study were interviewed during the antenatal period and postpartally. Victims of abuse were determined based on the following question: "Were you physically threatened or abused, or were you involved in any fights or beatings?" (p. 575). In this study verbal threats or emotional abuse were not considered as an episode of violence. Seven percent (n=92) of the women in the study reported physical abuse during pregnancy. Sixty percent were victims of one incident of abuse during pregnancy, 25% were abused twice, and 15% were victimized three or more times. Abusive incidents occurred more frequently in the first trimester (55%) than in the second (40%) and third trimesters (15%). Additionally, the researchers discovered the victims of abuse were at greater risk of having a history of depression and attempted suicide, having more current depressive symptomatology, reporting less happiness about being pregnant, and receiving less emotional support from others for the current pregnancy.

In 1992 Campbell, et al. reported a seven percent prevalence of abuse during pregnancy in a retrospective

study of 488 postpartum women from five hospitals in a metropolitan area of the midwest. A convenience sample of participants was obtained. The women were interviewed 2 to 5 days postpartum. A 9-item abuse assessment questionnaire from the Protocol of Care for the Battered Woman (1987) was utilized.

To assess the prevalence and severity of abuse during pregnancy a stratified, prospective cohort analysis was done by McFarlane, et al. (1992). The sample consisted of 691 African-American, Hispanic, and Caucasian pregnant women. The method utilized to assess prevalence of abuse was the Abuse Assessment Screen (AAS), a 5-item abuse-focused questionnaire. The AAS also includes a body map to mark injured areas of the body and a scoring scale for each incident of abuse that occurred. Women were considered abused if they answered yes to questions 2, 3, or 4. Using the 3-item AAS abuse during the current pregnancy was reported by 17% of the women.

After initial assessment utilizing the 3-item AAS, both abused and nonabused women were administered the Conflict Tactics Scale (CTS) and the Index of Spouse Abuse (ISA) in order to compare results. The CTS is a self-reported measure of four subscales to determine the frequency of violence within a relationship (Straus, 1979). Internal consistency reliability was 0.80, with construct validity also supported. The ISA is a 30-item scale which measures the severity of both physical and nonphysical abuse (Hudson

& McIntosh, 1981). The ISA reliability for this study was found to be 0.95. Analysis of the results confirmed that the utilization of three direct questions (questions 2, 3, and 4 from the original 5 -item questionnaire) was as reliable and valid in identifying abused women as the elaborate CTS and ISA research instruments. As concluded by McFarlane (1993) the three-question AAS along with the body map to mark injured body areas is clearly able to identify the abused woman with as much reliability as more elaborate research questionnaires.

In an attempt to determine the prevalence of physical abuse during late pregnancy and to discover how abused and nonabused women differ, Stewart and Cecutti (1993) surveyed 548 women. The data was obtained at one time from self-report questionnaires, anonymity was an option in the completion of the survey. The survey was comprised of three self-report questionnaires: the General Health Questionnaire (GHQ), the Fetal Health Locus of Control (FHLC), and the study questionnaire. The participants were English-speaking women at 20 weeks or more gestation selected consecutively from (a) a community-based prenatal clinic serving a low-income neighborhood, (b) obstetricians' and family practice physicians' offices serving a wide array of private prenatal patients, and (c) a university teaching hospital. Thirty-six (6.6%) women reported physical abuse during the current pregnancy. No significant difference was found in rates of abuse between settings. Of those women

who reported abuse during pregnancy, 23 (63.9%) reported increased abuse during pregnancy, and 24 (66.7%) women received medical treatment for abuse, but only one woman told her prenatal care provider about the abuse.

Gielen, O'Campo, Faden, Kass, & Xue (1994) interviewed 275 women three times during pregnancy and at six months postpartum. Nineteen percent of the women reported experiencing abuse prenatally, while 25 % of the women reported experiencing abuse postpartally. Using multivariate analysis the findings also revealed that being better educated and having a partner who ever used intravenous drugs as being associated risks of partner-perpetrated abuse. Being older, having a confidant, and having social support from friends were reported as significant protective factors in partner-perpetrated abuse.

Military Prevalence

There were few published military research studies found in an extensive literature review that specifically addressed the prevalence of abuse of pregnant women or the abuse of women in general. However, as acknowledged by Mollerstrom, Patchner, and Milner (1992) the military community is not immune to spousal abuse. As dictated by Department of Defense directives, the Air Force Central Registry is required to report all cases of spousal abuse. Mollerstrom, et al. indicated that 2,450 cases of spousal abuse in 1988, and 3,259 cases of spousal abuse were substantiated in 1989 based on registry data.

Neidig (1985), confirmed the lack of military literature on the incidence, prevention and treatment of spouse abuse, and hence the need to base intervention on observations made in the civilian community. Neidig also theorized that there are significant differences in the nature of domestic violence among the military and civilian communities. In a study of 273 married male military members who were assigned a stressful occupation (drill instructor), Neidig found that what consistently differentiated an abusive from nonabusive individual was the level of stress and marital dysfunction, not attitudinal variables (low self-esteem, untrusting and suspicious nature, sexist, deficient empathy, and dogmatism). Neidig's research implied that military occupational stress is the sole reason for marital conflict and abuse. While occupational stress may be a factor other studies have shown that it is not the sole risk factor for abuse.

Hurlbert, Whitaker, and Munoz (1991) studied the etiological characteristics of abusive husbands within a military population. This study compared abusive husbands with nonabusive, marital discordant husbands using six measures. Stratified random sampling of enlisted personnel was employed to achieve a sample of 30 in each group. As predicted by the researchers, the abusers possessed significantly higher type A behaviors, higher problem drinking behaviors, more rigid attitudes toward women, lower

marital satisfaction, and rated their wives less attractive than nonabusers.

In 1993, Miller and Veltkamp attempted to address the hardships and complexities in understanding and diagnosing family violence among military personnel. They reported that the number of unreported or underreported cases needs the immediate attention and sensitivity of health care professionals in the Department of Defense. They conclude that spouse and child abuse is not confined to any particular population of individuals, but it has been found to be more prevalent among civilian families experiencing financial constraints, frequent moves, and isolation from peer groups and family support systems, which are all characteristics that can be found in the military population.

Although not a prevalence study, the Abuse Victims Study (1994) sponsored by the Department of Defense consisted of three study task components based on substantiated cases of abuse: the Installation Process Study, which was a qualitative study that focused on identifying disincentives to report abuse in the military and documenting the Family Advocacy Programs (FAP) processes and services; the Victim Intake Survey, a survey completed by spouse abuse victims (n = 482) to explore the nature and extent of abuse, communication of the problem, and disincentives to report the problem; and the Personnel Records Analysis, a case control analysis to determine the impact on service members

careers after a substantiated report of abuse, the study compared a case sample of abusers (n = 14, 394 cases of substantiated abuse) with a control sample of non-abusers (n = 14,394 carefully matched for service, rank, gender, marital and family status, and military occupation). The Abuse Victims Study investigated both perceptions of the consequences of abuse and system responses to reported abuse. The following discussion of findings does not include those findings concerned with system responses.

The findings of the Installation Process Study (1994) reported that almost all participants perceived that the potential for adverse impact on the service member's career was the primary disincentive to report abuse. Other reasons for not reporting abuse included fear of further abuse, financial concerns, shame, sense of isolation, loss of privacy, perceived lack of appropriate services, distrust of the military, fear of family break-up, cultural norms and values. The FAP staff perceived that under-reporting is a problem, especially among officers. This perception was reinforced by two other findings in the study; many participants reported that abuse was ongoing for some time before it was reported, and that the FAP receives few self-reports of spouse abuse.

The findings of the Victim Intake Survey (1994) component revealed that the majority of the perpetrators of abuse were enlisted. The preponderance of those abused were female, and more than half of both the abused and the

perpetrators were younger than 25 years of age. In regard to the duration of abuse; 23% reported that this was the first incident of abuse experienced, 59% had been abused twelve months or less, and 26% had been abused for two years or longer, of which 9% had been abused for five years or longer.

Certainly the Abuse Victims Study (1994) has provided a plethora of information regarding the incidence of abuse in the military community and the response of the FAP. But, the FAP staff indicated themselves that there is an under-reporting of domestic violence. Clearly, there is a continued need for further research of the prevalence of domestic violence in the military community, including research focusing on domestic violence in the perinatal period.

Magruder, et al. (1995) examined Army data related to the substantiated incidents of spousal abuse. Data was reviewed for fiscal years 1989-1994. Four to six thousand cases of spousal abuse were substantiated each year during this time frame. The research found that the vast majority of reported spousal abuse involved the abuse of the wife by her husband. Over the time period of the study the incidence of reported abuse did not reveal a downward trend. Enlisted women married to enlisted men were at much greater risk for abuse than any other military couple. The researchers also found more abuse among couples in which the woman is the active duty member and the spouse is the

civilian. The findings also suggested that the unique characteristics of military families related to deployment may influence the level of spousal abuse. Clearly all of these variables need further research and how they may be linked to abuse in the perinatal period must also be studied.

Depressive Symptomatology

Kizilay (1992) identified living in an unsafe environment as a predictor for women at risk for depression. The consequences of unassessed/untreated depressive symptoms can lead to morbidity and mortality equal to or greater than that of patients with chronic illnesses such as hypertension, diabetes or arthritis (Wells, et al., 1989). West, et al. (1990) randomly selected thirty abused women at a local women's shelter. The women were assessed through an unstructured interview and the administration of the following psychiatric rating scales: the Inventory to Diagnose Depression, the 17-item Hamilton Psychiatric Rating Scale for Depression, the Post-traumatic Stress Disorder Structured Clinical Interview for DSM-III-R Module, and a Modified Conflict Tactics Scale. The participants were interviewed within their first two weeks at the shelter. The interviews and rating scales results revealed that greater than 36% of the women suffered from a major depressive disorder. The results also indicated that there was no evident correlation between the degree of abuse and the level of depression.

In a study to determine correlates of depressive symptomatology among battered women, 136 women were asked to complete a twenty-six page questionnaire (Sato & Heiby, 1992). The questionnaire consisted of the following measures: Zung's Self-Rating Depression Scale (SDS), the MMPI Lie Scale (L scale), the Conflict Tactics Scale (CTS), the Dyadic Satisfaction subscale (DS), and the measures of skill deficit which included a compilation of items to measure subject-perpetrated psychological and physical abuse, assertion, self-reinforcement, self-blame, and an indirect index of a history of depression. The participants were women who had reported physical victimization by a spouse or significant other in a one year period. The majority of subjects were Asian Pacific or Caucasian. Participants were classified as depressed if a score of 50 or more was achieved on the SDS. Depressive symptoms were high as measured by the SDS, the mean score was 48, the mode was 50. As determined by Zung's criteria nearly half of the participants (47%) reported clinical levels of depression.

Self-reported psychological measurements were administered to thirty-three women seeking therapeutic assistance in a community agency (Cascardi & O'Leary, 1992). The sample represents women who had been severely battered, 25 % of the women had been beaten more than 20 times in the last year. Participants completed five self-report psychological measurements of which the Beck Depression Inventory (BDI) was one. The study disclosed that

approximately 70% of the women scored greater than 14, and 52% scored greater than 20 on the BDI which reflects a severe level of depressive symptomatology. Depressive symptomatology significantly positively correlated with the frequency ($r = .5396$, $p < .01$) and severity of abuse ($r = .5389$, $p < .01$). Across the sample as the level of abuse (frequency, severity, and consequences) increased, the level of depressive symptoms also increased.

Gleason (1993) determined the prevalence of depression in two samples of abused women using the Diagnostic Interview Schedule (DIS). The DIS is a 263 item structured interview commissioned by the National Institute of Mental Health (NIMH) in the early 1980's in an attempt to establish the incidence of and prevalence of mental disorders in the United States. The first sample was comprised of 30 abused women from a shelter; and the second sample consisted of 32 abused women receiving assistance from the same shelter, but living at home (community). The comparison group of women was a random sample of U. S. women from the NIMH Epidemiological Catchment Area study. The rate of major depression in the shelter group was 63%, the rate in the community group was 81%, while the rate in the comparison group was 7%. The prevalence of major depression in both of the abused groups was significantly higher ($p < .01$) than the comparison group.

Fifteen women from a shelter in Northern Ireland were asked to complete a questionnaire containing questions to

evaluate causal attributions to marital violence (McClennan, et al., 1994). The participants also completed the Impact of Events Scale and the BDI. The scores on the BDI ranged from 4 to 24. Ratings on the questionnaire for causal attributions leaned toward globality and uncontrollability, denoting that the women perceived that the abuse affected other areas of their lives and that they had little control over the incidents. Ratings of greater globality significantly ($r = .53, p < .05$) correlated with higher scores on the BDI.

For the purposes of this study it is important to note that nonabused pregnant women may report some degree of depressive symptomatology, but that depressive symptomatology has been shown to be a significant correlate of abuse during pregnancy. In a retrospective study of 488 primarily Medicaid-eligible postpartum women (Campbell, et al. 1992), depression was recognized as a significant ($p < .001$) correlate of abuse during pregnancy. The relationship between abuse and depression was indicated as moderately strong. Eighty-three percent of those women abused during pregnancy reported that they were depressed as compared to fifty-seven percent of those not abused.

In 1992, Torres conducted exploratory research to examine differences between abused pregnant women and nonabused pregnant women, changes in the abusive relationship for the women prior to and during pregnancy, and causality between abuse and pregnancy. Utilizing a

convenience sample of 65 women in their third trimester, the researcher discovered 35% of the participants were abused physically and/or psychologically during their current pregnancy. Also, 55% of the subjects had been abused either during their current pregnancy or prior to this pregnancy. The pregnant abused group had lower levels of self-esteem and higher levels of depression than the pregnant nonabused group.

Summary

The proposed conceptual framework provides a schematic of domestic violence and related depressive symptomatology based upon the cycle of violence and grief theory as it applies to the loss of the idealized relationship. It also furnishes a foundation for nursing intervention in the utilization of Orem's self-care deficit theory.

A review of the literature reveals that the prevalence of domestic violence in pregnancy ranges from 1.5% to 23% in the civilian community. To date, no known published research on the prevalence of physical abuse in pregnancy has been compiled in the military community. Research has shown that depressive symptomatology is prevalent among abused women both pregnant and nonpregnant, and that it is a significant correlate of abuse in women (pregnant and nonpregnant).

CHAPTER III

Methodology

Design

A prevalence study of physical abuse during pregnancy and its relationship to depressive symptomatology within a military population was performed using a nonexperimental research design. The aims of the pilot study were to: (a) identify methods to document the prevalence of domestic violence, (b) examine the relationship between domestic violence and depressive symptomatology, and to (c) describe the various characteristics and conditions of abuse prior to (within the last year) and during pregnancy within the military community.

Setting

The study was conducted in military hospital clinics at Dover Air Force Base, Delaware; and National Naval Medical Center, Bethesda, Maryland. An additional site was originally contacted for inclusion, but access was denied. These hospital OB/GYN clinics serve the women's health care needs of active duty and the dependents of active duty members in the military community. The two sites have a combined annual delivery rate of 2000. The sites were selected in order to obtain a sample of the Armed Forces and its three branches (Air Force, Army, and Navy). Additionally, these sites were selected because they provided nursing support, an ease of inservice for study

protocols, and accessibility to important contacts at the site necessary to maintain the implementation of the study.

Sample

The convenience sample consisted of pregnant women, who were either active duty or dependents of active duty members, from all branches of the Armed Forces, and who received their prenatal care from one of the two hospital clinics. Criteria for inclusion consisted of any woman receiving prenatal care at either of the two study facilities between 20 November 1995 and 5 January 1996, regardless of race, age, gestation, socioeconomic status, or rank. Women were excluded from the study if they had literacy problems that precluded them from reading or responding to the Women's Well-Being Assessment Survey (see Appendix B).

To detect a relationship (small effect size) between abuse and depressive symptomatology compared with non-abuse, an N of at least 152 would provide power of .80 at α level of .05 (Burns & Grove, 1993). However, since the prevalence of abuse in pregnancy in the civilian population ranges from 1.5% to 23% and one can assume that the prevalence of abuse in pregnancy in the military community is comparable to the civilian population, the following formula was used to determine the appropriate sample size: A total of 500 subjects \times 10% prevalence rate = 50 self-reports of abuse. The goal of 50 self-reports was selected to provide sufficient power to detect a medium effect size.

Thus, the sample size goal was 500 participants. However, due to delays in approval from various institutions and the researcher's time constraints, a final sample size of only 298 was obtained.

Data Collection Procedures

Upon Institutional Review Board approval by the designated sites, and the University of Maryland at Baltimore (UMAB), the data collection began on 20 November 1995 at the National Naval Medical Center Bethesda and 6 December 1995 at Dover Air Force Base Hospital and was completed at both sites on 5 January 1995 (see Appendix C for UMAB Approval, Appendix D for National Naval Medical Center Approval, Appendix E for Dover Air Force Base Hospital Approval, and Appendix F for Memorandum of Understanding). The prenatal patients were approached concerning participation in the study at a point in the appointment process when they were not accompanied by their significant other. The clinical and research literature on domestic violence stresses the importance of addressing abuse in a private setting separate from the partner, family, and friends (King, et al., 1993; Norton, Peipert, Zieler, Lima & Hume, 1995; Parker, 1995). For both institutions, this opportunity was most often provided at the weights, measures, and urine screening station; and additionally in the exam room prior to their appointment; or in a designated office after their appointment. However, eliciting study participation varied depending on the

individual clinic routine, to ensure that it did not impact on the time constraints of the health care provider.

The prenatal patients at the study institutions were given an envelope containing a patient information coversheet, a resource card, and a Women's Pregnancy Well-Being Assessment Survey by clinic personnel at their routine prenatal appointments (individual contents to be discussed in detail). The patient information sheet and the Women's Pregnancy Well-Being Survey were assigned a matched randomly selected number (Burns & Grove, 1993). This was to assure that for every survey there was documentation of a witnessed verbal informed consent.

The prenatal patients were given the opportunity to completely read and review the Patient Information Coversheet (see Appendix G for Bethesda coversheet and Appendix H for Dover coversheet; format condensed). Additionally, the investigator verbally reinforced the salient points of the patient information sheet. Although the coversheets were slightly different at each site based on individual Institutional Review Board requirements, the patient information coversheets contained all the essential elements for informed consent. The participants were assured that completion of the survey and participation was purely optional and that anonymity would be maintained. After review of the coversheet, if the patient agreed to participate, documentation of informed verbal consent was

obtained using a witness' signature. A witness not associated with the study, assured the following:

1. The patient read and reviewed the coversheet.
2. The patient was aware of the nature of the proposed study.
3. The patient was aware of the risks and benefits involved.
4. The patient freely agreed to participate in the study.
5. The patient had not already completed the survey.

Once the witness identified that these elements were met the Patient Information Coversheet was signed by the witness. The participant was instructed to complete the survey prior to returning to the waiting room. When finished, the participant sealed the survey in the provided envelop and returned it to the witness, the investigator, or the locked collection box whether they completed the survey or not.

Prior to data collection at each site, an overview about the elements of the proposed study and survey was provided to the staff of the OB/GYN Clinic, Family Advocacy, and additional hospital staff members as warranted. Also, designated witnesses were determined at each study site. A more detailed overview of the study, survey, and data collection process was discussed with each site's designated witnesses. Prior to initiating the data collection process, the designated witnesses were required to demonstrate a

clear understanding of the study, the data collection process, and the required elements of informed consent. Also, the investigator discussed with the designated witnesses the most appropriate place to initiate the survey based on the individual clinic routine.

Originally, it was thought that the designated staff collectors could be utilized in the data collection process, however this proved to be impossible due to staffing and time constraints of the study. The researcher performed the majority of the data collection responsibilities. During the data collection process at least one investigator remained on site. Clinic staff members and health care providers were helpful in identifying potential subjects, modifying routines so that participants could complete surveys, and ensuring that surveys were placed in the locked collection box.

One month after initiating the data collection process, the study was evaluated for adequate number of participants. The sample size at that time was 175. At that time it was determined that data collection would continue until a sample size of 300 was obtained or no later than 5 January 1996.

Protection of Human Subjects

The literature on domestic violence consistently reiterates that the women's safety when assessing abuse must not be compromised (Helton & Snodgrass, 1987; McFarlane & Parker, 1994). Therefore, the researcher employed numerous

measures to safeguard, protect, and minimize the risks to the participants. First, no identifiers were placed on the survey. Second, the individual survey information obtained was available only to the principle investigator and the faculty advisors. Third, the responses were returned to the investigator or the locked collection box. Finally, the individual responses were not reviewed until all surveys were collected and the data collection process was completed.

One of the crucial components of research is the documentation of signed informed consent, however it was felt that this would compromise the participant and the researcher in this particular study. If the participant self-reported abuse, she may suffer from mental anguish because of her disclosure of abuse. The participant may believe that either she or her partner will suffer or be punished because of her actions. If the identity of the victim and abuser is known to the researcher, the researcher would be placed in the position of reporting the abuse. It was determined by the researcher that this was not the purpose of the research, as well as not one of the desired consequences of the outlined research. In addition to compromising the participants well-being, it could jeopardize the results of the study. Research has shown that women when questioned about abuse on an anonymous and confidential basis, rarely refuse to answer when questioned (Helton, 1987; McFarlane & Parker, 1994; Parker, et al.

1994; Stewart & Cecutti, 1993). Therefore, a waiver in the documentation of the signed informed consent was sought and obtained (from the Clinical Investigations Department, National Naval Medical Center, Bethesda and UMAB Institutional Review Board).

It was realized that the initiation of this survey could cause the participants to evaluate and assess their current relationship. Some participants would seek support immediately, while others may not be ready to seek assistance from health care providers or support services. The coversheet for the survey strongly encouraged the participants to share concerns regarding abuse or depressive symptomatology with their health care providers. The following measures were taken by the investigator in order to ensure appropriate resources and assistance were available to the participants:

1. Provided the OB/GYN Staff with an overview of Domestic Violence and Depressive Symptomatology to ensure that they were knowledgeable about local resources (military and civilian).
2. Notified local support services (shelters, Family Advocacy, Psychiatric Department) of the study.
3. Included a resource card with the Women's Pregnancy Well-Being Assessment Survey, which had local, as well as national hot line numbers for domestic violence and depression.

Halpern et al. (1989) reported that the use of wallet-sized family violence referral cards in Emergency Departments can reduce the risk of subsequent abuse. The authors added that many of the abused women, who received the cards, carried the cards for months until it was needed for crises counseling, shelter or legal information.

Operational Definitions

The two concepts to be studied in this investigation were domestic violence (abuse) and depressive symptomatology, various instruments were utilized to measure the prevalence of these defined concepts. The Abuse Assessment Screen was used to measure the prevalence of abuse in the designated population. The Beck Depression Inventory (Short Form) was utilized to measure the level of depressive symptomatology in the sample population.

Instruments

The Women's Pregnancy Well-Being Assessment Survey (see Appendix C), was developed by the investigator using 3 well known instruments. The survey was reviewed by the National Naval Medical Center, Bethesda, Clinical Investigation Department; Dover Air Force Base Hospital Commander; and the University of Maryland at Baltimore, Institutional Review Board. The Women's Pregnancy Well-Being Assessment Survey contains the following three scales/instruments: Abuse Assessment Screen (AAS) (McFarlane, 1993), Beck Depression Inventory (BDI) (Beck & Beck, 1972), and the Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965). Only the AAS and the

BDI will be utilized to answer the questions proposed by this researcher. Also, the survey includes 20 questions deemed pertinent background and sociodemographic information to be obtained from this specific study population.

Abuse Assessment Screen

The AAS was used to assess the prevalence of abuse within the study population. The Nursing Research Consortium on Violence and Abuse designed the AAS based on the premise that the assessment for abuse must be straightforward and direct (Soeken, McFarlane, Parker, & Lominak, 1995). The AAS has been widely used to establish the prevalence of abuse during pregnancy (McFarlane, et al., 1992; Norton, et al., 1995; Parker, et al., 1994). Approval for the use of the AAS was obtained (see Appendix A).

The AAS consists of a 3-item abuse focus questionnaire, a body map to mark injured areas of the body, and a scoring scale for each incident of abuse that occurred. The three questions contained on the AAS determine the frequency, severity, and the perpetrator of abuse; and the body site of injury within a stated period of time (see Appendix B). The three questions, which require a yes or no response, are as follows:

1. Within the last year, have you been hit, slapped, kicked, or otherwise physically hurt by someone?
2. Since you've been pregnant, have you been hit, slapped, kicked, or otherwise physically hurt by someone?

3. Within the last year, has anyone forced you to have sexual activities?

Additionally the screen indicates reported injuries in the following categories: threats of abuse, including threats with a weapon; slapping or pushing with no injuries or lasting pain; punching, kicking, bruises, or cuts or continuing pain; beating up, severe contusions, burns, and broken bones; head injuries, internal injury, permanent injury; and use of a weapon or wound from a weapon. In this study women answering "yes" to any of the three questions was considered abused. Also, when the abusive episode includes several categories, the most severe injury was recorded.

Soeken, et al. (1995) tested the reliability and validity of the AAS to measure the frequency and severity of abuse. Using an ethnically stratified cohort of women test-retest reliability ($n=48$; $n=40$) assessment resulted in 83% and 100% agreement respectively. Criterion-related validity assessment was established ($N=560$) using the Conflict Tactics Scale ($t = 9.95, 9.55, \text{ and } 6.92; p < .001$), Index of Spouse Abuse ($t = 11.59 \text{ and } 12.08; p < .001$), and the Danger Assessment Scale ($t = 11.94, p < .001$).

Beck Depression Inventory

The short form BDI was used to determine if there was a relationship between depressive symptomatology and abuse in pregnancy in this study population. The BDI is the most recognized and frequently used self-report measure of

depressive symptomatology. Approval for the use of the BDI was obtained (see Appendix I).

The short form BDI consists of 13 items comprising four major components of depression: behavioral, affective, cognitive, and physiological. The short form BDI is designed to assess the intensity of depressive symptomatology in terms of the following 13 symptom-attitude categories: mood, pessimism, sense of failure, lack of satisfaction, guilt feelings, self-dislike, suicidal wishes, social withdrawal, indecisiveness, distortion of body image, work inhibition, fatigability, and loss of appetite (Shaver & Brennan, 1991).

Each statement on the short form BDI is ranked to reflect the range of severity of the symptom, from neutral to maximal severity. Numerical values from 0 to 3 are assigned to each statement to indicate the degree of severity of depressive symptoms. Each of the 13 items has four alternatives ranging from 0 (low severity) to 3 (maximum severity). Total possible scores range from 0 to 39 (Beck & Beck, 1972). As suggested by Beck and Beck the following cutoffs can be applied to the short form BDI: 0-4, none or minimal; 5-7 mild; 8-15, moderate; and 16 and above, severe depressive symptomatology. The suggested cutoff scores were used for this study.

The short form BDI has been widely used to measure and identify symptoms of depression in a variety of clinical situations (Shaver & Brennan, 1991). The short form BDI

correlated .96 with the more widely used 21 symptom-attitude category long form BDI and .61 with clinical ratings (Shaver & Brennan). Beck (1970) reported a split-half coefficient of .86, with a Spearman-Brown correction the coefficient rose to .93. Stability coefficients over a period of weeks has been documented at .70 (Steer, Beck, & Garrison, 1986). The short form BDI has been found to be consistently and significantly related to clinical ratings of depression. Convergent validity of the short form BDI has been reported between .60 and .90 (Shaver & Brennan).

Background Questionnaire

The study questionnaire included 20 questions on sociodemographic aspects of the participant and partner; age; level of education (participant only); number of pregnancies; work status; rank and branch of service of sponsor; deployment status and amount of separation due to deployment; and social support information. Numerous studies (Berenson, et al., 1991; Helton, et al., 1987b; McFarlane, 1993), have included the above sociodemographic variables as a part of the research protocol.

The background questionnaire also included aspects that are unique to the military community. Rank can be utilized as a measure of economic status through the use of the military pay scale. Separation from spouse and family is a common component of the job. This is primarily attributed to deployments, training missions, and duty station reassignment, which may take the military member away from

the family home. Frequent moves and separation from spouse may pose unique challenges to the social support system. Questions on deployment status, amount of separation due to deployment, and social support status were used to provide a measure of social isolation and separation (separation from significant other as well as separation from extended family).

A question was included to inquire if participants suspected abuse of peers or friends by significant others within their community. It was anticipated that this information might provide a secondary estimate of domestic violence within the military community and the participants perception of the prevalence of domestic violence within the military community. Also, a question to assess if participants were aware of potential resources in their community was included. Finally, there was a query if the subject was accompanied to the appointment by her significant other. If so, did that presence effect her willingness to self-report abuse?

Data Analysis

The primary focus was directed towards evaluating the prevalence of domestic violence during pregnancy within the military community. Descriptive statistics were utilized to analyze the data from the study. The data was described in terms of three characteristics: (1) the shape of the distribution scores, (2) central tendency, and (3) variability.

Data obtained from the short form BDI was used to evaluate depressive symptomatology and its relationship to self reported abuse. A Pearsons correlation (one tailed test) was used to measure the correlation between depressive symptomatology and its relationship to domestic violence.

Summary

A pilot study was performed at two military hospital outpatient clinics. Data collection was performed between 6 November 1995 and 5 January 1996 yielding a convenience sample of 298 pregnant participants. Participants voluntarily completed the Women's Pregnancy Well-Being Assessment Survey which included demographic questions, an abuse screening tool, and a measure of depressive symptomatology. The primary focus of data analysis was the evaluation of the prevalence of domestic violence within this population and its relationship to depressive symptomatology.

CHAPTER IV

Results

Overview

The purpose of this preliminary study was to identify methods to document the prevalence of domestic violence, and to describe the various characteristics and conditions of abuse during pregnancy within a specific military community. In addition, the descriptive study examined the relationship between domestic violence and depressive symptomatology within this population. The cycle of violence, grief theory and Orem's self-care deficit theory established the conceptual framework guiding the study.

Three hundred seventeen women were offered the opportunity to complete the Women's Pregnancy Well-Being Assessment Survey. Two hundred ninety-eight women completed the survey, for an overall response rate of 94%. Of the 298 completing the survey, 201 were from National Naval Medical Center, (Bethesda) and 97 were from Dover Air Force Base, Delaware. Five (1.5%) elected not to participate in the study. Four were ineligible to participate due to language (literacy) issues. Ten (3.1%) surveys were not returned to the collection box or data collector.

The data was analyzed using descriptive statistics, Pearsons correlation test, t tests, and chi-square tests. A 0.05 level of significance was used throughout the data analysis. The analysis was performed with the Statistical

Package for the Social Sciences (version 6.1.3, SPSS Inc., Chicago). Assistance in the Data Analysis phase was provided by two doctorally prepared faculty advisors (Tari G. Radin, Ph.D., RN and Phyllis Sharps, Ph.D., RN, COL, USAR) from the University of Maryland at Baltimore, School of Nursing, Department of Maternal and Child Health, and Paul T. Haefner, Ph.D., Licensed Clinical Psychologist.

Characteristics of the Sample

The sample consisted of 298 pregnant women (active duty and dependents of active duty members) who received their prenatal care in two military hospital clinics. As shown in Tables 4-1 and 4-2, the women were predominately married (89.6 %) and white, not of Hispanic origin (71.2%), with a mean age of 26 years (range 16 to 42 years). The mean length of their current relationship was 5.57 years (range 6 months to 21 years). The mean number of pregnancies and number of living children were 2.4 pregnancies and 0.84 living children. The mean gestational age of the women completing the survey was 27.3 weeks.

The sample was generally well educated with 97.3% of the women possessing at least a high school education. Two hundred seventeen women (73.3%) were dependents of active duty members; whereas 89 of the women were active duty members, 62 (20.8%) were enlisted and 17 (5.7%) were officers in the military. The branch of service of the families was 106 (38.0%) Air Force, 72 (25.8%) Navy, 62 (22.2%) Army, 24 (8.6%) Marine Corps, 11 (3.9%) Coast Guard,

and 4 (1.4%) Public Health Service. The partners of the subjects were primarily white, not of Hispanic origin (62.1%), with a mean age of 29 years (range 17 to 48 years).

The mean length of time at their current duty station was 2.37 years, with a range of 1 week to 20 years. The mean number of separations due to deployment in the last three years was 2.2 times with a mean length of separation of 4.8 months (range less than 1 month to 30 months).

As shown in Table 4-3, Only 26.2% of the women lived on base. Forty-nine percent of the women worked outside the home. Thirty-four percent of the women sampled reported that they had no supportive family members or close friends who lived within the local area. Twelve percent (36) had friends or peers within their community (military) who they suspect are abused by their significant other. Fifty-four (18.1%) of the women surveyed reported abuse in their family of origin. More than thirty-five percent ($n = 106$) of the women were unaware of abuse services in their local community. Thirty percent ($n = 91$) of the women were accompanied by their partner to their prenatal appointment.

Table 4-1

Descriptive Characteristics of 298 Pregnant Women
Receiving Care in Selected Military Hospital Clinics

Variable	Mean	(SD)
Age (self)	26.97 years	(5.43)
Age (partner)	29.12 years	(5.98)
Length of current relationship	5.57 years	(3.77)
Number of pregnancies	2.41	(1.27)
Number of living children	.84	(.82)
Gestational Age	27.30 weeks	(8.64)
Length at current duty station	2.37 years	(2.85)
Total number times separated due to deployment	2.00 times	(4.61)
Length separation due to deployment	4.86 months	(6.16)

Table 4-2

Sociodemographic Characteristics of 298 Pregnant Women
Receiving Care in Selected Military Hospital Clinics

Variable	n	(%)
Branch of Service of family		
Air Force	106	(38.0)
Army	62	(22.2)
Coast Guard	11	(3.9)
Public Health Service	4	(1.4)
Marines	24	(8.6)
Navy	72	(25.8)
Marital Status		
Married	266	(89.6)
Not Married	31	(10.4)
Race (Self)		
American Indian	5	(1.7)
Asian or Pacific Island	10	(3.4)
Black, not Hispanic	53	(18.2)
Hispanic	16	(5.5)
White, not Hispanic	208	(71.2)
Race (Partner)		
American Indian	2	(.8)
Asian or Pacific Island	7	(2.7)
Black, not Hispanic	51	(19.5)
Hispanic	16	(6.1)
White, not Hispanic	185	(70.9)
Rank		
Dependent of Active Duty	217	(73.3)
Enlisted	62	(20.9)
Officer	17	(5.7)
Education (Self)		
Some high school	8	(2.7)
High school graduate	64	(21.5)
Some College	119	(39.9)
College Degree	77	(25.8)
Graduate Degree	30	(10.1)

Table 4-3

Responses to Sociodemographic and Abuse Questions

Question	n	(%)
Live on Base		
No	207	(72.6)
Yes	78	(27.4)
Work outside the home		
No	115	(51.6)
Yes	108	(48.4)
Support in the local area		
No	102	(34.3)
Yes	195	(65.7)
Suspect others abused (military)		
No	256	(87.7)
Yes	36	(12.3)
Victim of abuse in family of origin		
No	241	(81.7)
Yes	54	(18.3)
Aware of services in community		
No	106	(35.8)
Yes	190	(64.2)
Accompanied by significant other		
No	204	(69.2)
Yes	91	(30.8)

Research Question One

The first research question asked: What is the prevalence of self-reported abuse among pregnant women within a specific military population? This study utilized the 3-item AAS to assess the prevalence of abuse within the study population. The frequency and percent of self-

reported abuse among pregnant women receiving care in military hospital clinics are presented in Table 4-4.

Prevalence of Abuse

Of the 298 women questioned 9.4% (n = 28) answered "yes" to one of the three abuse questions on the AAS (Table 4-4). Nine percent (n = 27) of the women answered "yes" to physical abuse in the past year. Ten women (3.4%) answered "yes" to abuse during pregnancy. While 1.7% percent (n = 5) reported forced sexual activity in the last year. When questioned as to who physically hurt or sexually abused them, most women indicated that their husband was the perpetrator. Boyfriend was the second most common response with "other" indicated in seven of the cases.

Forty-three percent (n = 12) of the abused sample were active duty members. The percentage of abused active duty members was 15%. Sixteen percent (n = 10) of the enlisted members in the sample were abused, of the 17 officers in the sample 12% (n = 2) were abused. Forty-three percent (n = 12) of the abused sample were dependent wives, of the 201 dependent wives in the sample 6% were abused. In the abused sample 14% (n = 4) were dependent daughters, of the 16 dependent daughters in the sample 25% were abused (Table 4-5, Table 4-6). Overall, these findings indicate that active duty women are more likely to be abused than dependent women. However, dependent daughters are at greatest risk for being abused.

Table 4-4

Frequency and Perpetrator of Abuse Using the Abuse
Assessment Screen (AAS)

Question	n	(%)
Physically hurt by someone in last year		
No	271	(90.9)
Yes	27	(9.1)
If hurt by whom		
Husband	12	(48.0)
Boyfriend	9	(36.0)
Other	3	(12.0)
Multiple	1	(4.0)
Physically hurt since pregnant		
No	288	(96.6)
Yes	10	(3.4)
If hurt by whom		
Husband	4	(50.0)
Boyfriend	2	(25.0)
Other	2	(25.0)
Forced sexual activities in last year		
No	293	(98.3)
Yes	5	(1.7)
If forced by whom		
Husband	2	(50.0)
Boyfriend	2	(50.0)

Table 4-5

Characteristics of the Abused Women According to Active Duty Versus Dependent Status (N = 28)

Variable	n	(%)
Active Duty	12	(43.0)
Dependent Wife	12	(43.0)
Dependent Daughter	4	(14.0)

Table 4-6

Proportion of Abused Women According to Active Duty Versus Dependent Status

Variable	N	n	(%)
Active Duty	79	12	(13.5)
Enlisted	62	10	(16.0)
Officer	17	2	(12.0)
Dependent	217	12	(5.5)
Wife	201	12	(6.0)
Daughter	16	4	(25.0)

Frequency and Severity of Abuse

Table 4-7 depicts the frequency of abuse prior to and during pregnancy. The mean number of times that the women was physically hurt in the last year was three with a range of 1 to 10. The mean number of times physically hurt during pregnancy was 2.75 with a range of 1 to 5. The mean number of times of forced sexual activity was 2.33 with a range from 1 to 4.

Table 4-7

Descriptive Characteristics of the Abused Women Using
the Abuse Assessment Screen

Variable	Mean	(SD)
Number times physically hurt in the last year	3.09	(2.52)
Number of times physically hurt during pregnancy	2.75	(1.91)
Number of times forced sexual activity in the last year	2.33	(1.53)

Severity of abuse is classified on the AAS from 1 to 6 with 1 being the least severe (threats of abuse) and 6 the most severe (use of weapon or wound from weapon). As depicted in Table 4-8, the mean classification in this sample was 2.92 with a range from 2 to 6. The majority of the sample (n = 21) reported slapping, pushing, no lasting pain (n = 9); or punching, kicking, bruises, cuts, and/or lasting pain (n = 12). One member of the sample reported a classification of six. In recording the location of abuse on the body map the most frequent area cited was the back of the torso, followed in decreasing frequency by the face, upper extremities, head, front of the torso, lower extremities, and the neck.

Table 4-8

Classification of Abuse by the Abused Women Using the Abuse Assessment Screen

Type of Injury	n	(%)
1 = Threats of Abuse	0	(0)
2 = Slapping, pushing, no lasting pain	9	(36.0)
3 = Punching, kicking, bruise, cuts, lasting pain	12	(48.0)
4 = Beating up, severe contusions, burns, broken bones	2	(8.0)
5 = Head injury, internal injury, permanent injury	1	(4.0)
6 = Use of a weapon; wound from weapon	1	(4.0)

Research Question Two

The second research question asked: What are the characteristics associated with self-reported abuse within a military population (branch of service, military rank of family, deployment status, and location of residence)? Chi-square statistics were used to determine the demographic differences between the nonabused and abused sample. As highlighted in Table 4-9, military rank (participant relationship noted as officer or enlisted) was significant ($\chi^2 = 8.3089$, $p < .01$, 4 missing cases all dependent daughters). A greater proportion of abuse occurred in enlisted relationships than in officer relationships.

Table 4-9

Military Demographic Differences (Military Rank) Between
Abused and Nonabused Pregnant Women Receiving Care in
Selected Military Hospital Clinics

Abuse	Military Rank		TOTAL
	Officer	Enlisted	
No	94	155	249
Yes	2	22	24
TOTAL	96	177	273

Note. Missing observations: 25

$\chi^2 = 8.308$, $df = 1$, $p < .01$

The following demographic characteristics were determined to be nonsignificant: branch of service, location of residence, and data collection site (Table 4-10). In assessing the military rank of the perpetrator of abuse 41.7% ($n = 10$) were from E-1 to E-3, 45.8% ($n = 11$) were from E-4 to E-6, 4.2% ($n = 1$) were from E-7 to E-9, and 8.3% ($n = 2$) were officers (Table 4-11). Four dependent daughters did not report data related to rank of their partner in this field. possibly because their partner is not a military member.

Table 4-10

Military Demographic Characteristics (Differences) of
Abused and Nonabused Pregnant Women Receiving Care in
Selected Military Hospital Clinics

Characteristic	χ^2	p-value
Branch of Service	1.934	NS
Deployment	.5390	NS
Location of Residence	.3973	NS

Table 4-11

Characteristics of Abused Women According to the Rank of
the Perpetrator

Variable	n	(%)
E-1 to E-3	10	(41.7)
E-4 to E-6	11	(45.8)
E-7 to E-9	1	(4.2)
Officer	2	(8.3)

Research Question Three

The third research question asked: What are the demographic differences between those who self-report abuse and those who do not report abuse within this population (race, age, participant level of education, marital status). Chi-squared statistics were used to determine demographic

differences between the abused and nonabused sample. As highlighted in Table 4-12, marital status was significant ($\chi^2 = 16.654$, $p < .0001$), indicating that women not in marital relationships were more likely to be abused. Also significant was race of self ($\chi^2 = 14.009$, $p < .01$) (Table 4-13), and race of partner ($\chi^2 = 9.368$, $p < .05$) (Table 4-14), suggesting that a greater proportion of Hispanic women (31%) were abused followed by the combined category of American Indian and Asian or Pacific Islanders (20%); Black not of Hispanic origin (13%); and white not of Hispanic origin (6%). A greater proportion of the perpetrators of abuse were Black not of Hispanic origin (19%) followed by Hispanic (12%); and white not of Hispanic origin (6%).

The following demographic characteristic were determined to be nonsignificant: support in local area; accompanied to appointment, however it is important to note that 7 of the 28 women who self-reported abuse were accompanied to their appointment by their significant other; abuse in family of origin; and level of education (Table 4-15).

Table 4-12

Demographic Differences (Marital Status) Between Abused and Nonabused Women Receiving Care in Selected Military Hospital Clinics

Abuse	Marital Status		TOTAL
	Married	Single	
No	248	22	270
Yes	18	9	27
TOTAL	266	31	297

Note. Missing Observations: 1

$\chi^2 = 16.654$, $df = 1$, $p < .0001$,

Table 4-13

Demographic Differences (Race of Self) Between Abused and Nonabused Women Receiving Care in Selected Military Hospital Clinics

ABUSE	Race of Self				TOTAL
	Other*	Black	Hispanic	White	
No	12	46	11	195	264
Yes	3	7	5	13	28
TOTAL	15	53	16	208	292

Note. Missing observations: 6

*Combines American Indian and Asian or Pacific Islander

$\chi^2 = 14.009$, $df = 3$, $p < .01$

Table 4-14

Demographic Differences (Race of Partner) Between Abused and Nonabused Women Receiving Care in Selected Military Hospital Clinics

ABUSE	Race of Partner				TOTAL
	Other*	Black	Hispanic	White	
No	9	41	14	173	237
Yes	0	10	2	12	24
TOTAL	9	51	16	185	261

Note. Missing Observations: 37

*Combines American Indian and Asian or Pacific Islander
 $\chi^2 = 14.009$, $df = 3$, $p < .05$

Table 4-15

Demographic Characteristics (Differences) of Abused and Nonabused Pregnant Women Receiving Care in Selected Military Hospital Clinics

Characteristic	χ^2	p-value
Support in local area	.334	NS
Accompanied to appointment	.337	NS
Abuse in family of origin	.927	NS
Level of education	9.267	NS

Additionally a Pearsons test was used to assess the relationship between age (self and partner) and abuse. As shown in Table 4-16, a significant inverse relationship was discovered. Age of self was significant ($r = -.2740$, p

<.01) as was age of partner ($r = -.1907$, $p < .01$), suggesting that the younger the woman and her partner, the more likely for an abusive relationship to occur.

Table 4-16

Assessing the Relationship Between Age (Self and Partner) and Abuse

Characteristic	r	p-value
Age(Self)	-.2740	<.01
Age(Partner)	-.1907	<.01

Research Question Four

The fourth research question asked: Is there a relationship between depressive symptomatology and self-reported abuse among pregnant women in military health care? Total scores for the BDI ranged from 0 to 21. The BDI mean total score for the sample was 3.61. The BDI mean total score of the nonabused women was 3.25, while the mean total score for the abused women was 7.0.

First, t-tests were used to determine differences in total scores on the BDI between the abused and nonabused sample. As depicted in Table 4-17, a significant difference was noted ($t = -5.23$, $p = .000$) between the two groups. Second, a Pearsons test was performed to assess the relationship with the AAS total score and the BDI total

score. As outlined in Table 4-18, the results indicated a significant relationship between the level of depressive symptomatology and abuse in this sample ($r = .2931$, $p = .000$).

Table 4-17

t-Test Comparison of BDI Total Scores Between Abused and Nonabused Women Receiving Care in Selected Military Hospital Clinics

Variable	n	Mean	SD
Nonabused	265	3.25	3.45
Abused	28	7.00	4.88
$t = -5.23$, $p = .000$, $df = 291$			

Table 4-18

Assessing the Relationship Between Abuse and Depressive Symptomatology

Variables	r	p-value
AAS/BDI Total Score	.2931	.000

CHAPTER V

Discussion

The purpose of this preliminary study was to identify methods to document the self-report of abuse, to determine the prevalence of domestic violence prior to (within the last year) and during pregnancy, and to describe various characteristics and conditions of abuse within a specific military community. The preliminary study also, sought to determine if there was a relationship between physical abuse and depressive symptomatology.

Characteristics of the Sample

The study population consisted of 38% Air Force, 25.8% Navy, 22.2% Army, 8.6% Marine Corps, and 3.9% Coast Guard. This is comparable to the total active duty population which consists of 26% Air Force, 33% Army, 2% Coast Guard, 11% Marine Corps, and 28% Navy (Department of Defense, 1995). According to the Department of Defense (1995) the active duty military population is made up of 84% enlisted and 16% officer personnel. The study population had a higher percentage of officers (35%) than does the total population of active duty military members

The Department of Defense (1995) reports the ethnic make-up of active duty personnel as 70.18% white, not of Hispanic origin; 19.36% Black Americans; 5.62% Hispanic Americans; and 4.84% other, which includes Native Americans,

Alaskan Natives and Pacific Islanders. This compares similarly to the ethnic make up of the sample population which included 69.9% white, not of Hispanic origin; 18.2% Black Americans; 5.5% Hispanic Americans; and 5.1% other, which included Native Americans and Asian or Pacific Islanders.

The level of education of the participants of the study consisted of some high school (2.7%), high school graduates (21.5%), some college (39.9%), college degrees (25.8%), and graduate degrees (10.1%). It is difficult to compare this with the level of education of active duty military members because only 26.7% of the participants were active duty members. The same premise holds true for the comparison of age of the study population.

Research Question One

What is the prevalence of self-reported abuse among pregnant women within a specific military population? There was no comparison data found on the prevalence of abuse in the military community. The study findings that have been reported are generally based on data from substantiated cases of abuse. In the civilian community many studies have reported the prevalence of abuse during pregnancy ranging from 1.5% to 23% (Amaro, et al., 1990; Anderson, et al., 1986; Bullock & McFarlane, 1989; Campbell, et al., 1992; Gelles, 1975; Gielen, et al., 1994; Helton, 1986; Helton, et al., 1987a, 1987b; Helton & Snodgrass, 1987; McFarlane, 1991; McFarlane, et al., 1992; Parker & McFarlane, 1994;

Stewart & Cecutti, 1993). Additional studies have also reported the prevalence of abuse prior to pregnancy (within the last year) ranging from 3% to 9% (Adams-Hillard, 1985; Amaro, et al., 1990; Berenson, et al., 1990; Campbell, et al., 1992; Helton, et al., 1987b; McFarlane et al., 1992).

A limitation to this study was previously stated as a potential for underreporting based on the use of self-report instead of interview format. Although, it is still possible that underreporting did occur, the prevalence of abuse in pregnancy in this study (3.4%) falls within the lower portion of the range of those reported in the civilian community. Rather than underreporting these findings could also indicate that for some women pregnancy is a protective factor, and if this is the case it only reinforces the need for continued screening for abuse after the birth of the infant. The prevalence of abuse prior to pregnancy (within the last year) was 9%, which falls in the upper portion of the range in the civilian community studies. The prevalence of abuse obtained to some degree substantiates the effectiveness of the method (tool) of documentation used. However, if underreporting occurred as has been suggested, this strongly supports the need for further investigation in a larger military sample and use of interview format in conjunction with the survey tool used.

The Victims Survey Preliminary Report (1994), was a study designed to be a census survey of all cases of abuse reported to the Family Advocacy Programs of the Army, Navy,

Air Force, and Marine Corps. Severity of abuse based on reported registry information was characterized by the Family Advocacy Programs (FAP) staff not by the victim of abuse. The FAP staff subjectively characterized 57% of the spouse abuse cases as "mild", 33% as "moderate", 3% as "severe" abuse and considered in 7% of the cases that no abuse had occurred. In comparison, using the AAS classification of severity of abuse, levels 1 and 2 as mild, levels 3 and 4 as moderate, and levels 5 and 6 as characteristic of severe abuse, in the study population 36% would be characterized as having suffered from mild abuse, 56% moderate abuse, and 8%, severe abuse. Overall, in this study there was an increased proportion of women in the moderate and severe classifications of abuse.

Research Question Two

The second research question asked: What are the characteristics associated with self-reported abuse within a military population (branch of service, military rank, deployment status, and location of residence)? It is not possible to compare the findings from these military characteristics to those in the civilian population based studies due to the uniqueness to the military. There is currently available only one military study available to act as a comparison, the Abuse Victims Study (1994). Neither the Personnel Records Analysis Preliminary Report (1994), nor the Victims Survey Preliminary Report (1994) recorded the differences in the incidence of spouse abuse by branch

of service. In the sample for this study no significant differences were found in the self-reporting of abuse among the Air Force, Army, Marine Corps, or the Navy.

The Abuse Victims Study (1994) did find differences in the rank/paygrade of the perpetrator of abuse as did this study. However, the degree of significance varied among this study and the DoD study. The Abuse Victim Study found that the majority (69%) of spouse offenders in the military were in the E-4 to E-6 paygrades, 23% were in the paygrades E-1 to E-3 , 5% were in paygrades E-7 to E-9, and 2% were officers. Overall in the DoD study the perpetrators of abuse were found to be 98% enlisted and 2% officer. This differs from the findings of this study in that 41.7% were in the E-1 to E-3 paygrades, 45.8% were in paygrades E-4 to E-6, 4.2% were in the paygrades E-7 to E-9, and 8.3 % were officers. In addition, four dependent daughters did not report the rank/paygrade of their perpetrators possibly because their partner was not a military member or for fear of exposing the military member i.e., father or boyfriend. Overall in this study 91.7% of the offenders were enlisted and 8.3% were officers. The pilot study results revealed a higher proportion among military officers than the Abuse Victims Study.

The characteristics of location of residence and the frequency of deployment status although not significant in this study may be a contributory factor both positive and negative in the self-reporting of abuse. A majority of the

sample lived off base and may more readily have access to and use of nonmilitary support services which would negate the fear of reprisal in the military community. In regard to the nonsignificance of deployment status there may be some connection to the extent that the perpetrator is absent and therefore the victim cannot be abused.

Research Question Three

The third research question asked: What are the demographic differences between those who self-report abuse and those who do not report abuse within this population (race, maternal age, level of education, marital status). Significant differences were found in the marital status of the participants, race and maternal age. In examining the nonabused participants 8% were unmarried as compared to the 33% of the abused participants.

In this study all races of the participants, both abused and nonabused, and their partners were represented. However, the percentage varied in each group. The nonabused participants were predominantly white, not of Hispanic origin (74%); followed by black, not of Hispanic origin (17%); Hispanic (4%); and five percent American Indian, Asian or Pacific Islander. Their partners were predominantly white, not of Hispanic origin (73%); followed by black, not of Hispanic origin (17%); Hispanic (6%); and four percent American Indian, Asian or Pacific Islander. The abused participants were primarily white, not of Hispanic origin (46%); followed by black, not of Hispanic

origin (25%); Hispanic (18%); and eleven percent American Indian, Asian or Pacific Islander. Their partners were predominantly white, not of Hispanic origin (50%); followed by black, not of Hispanic origin (42%); and Hispanic (8%).

Studies of abuse during pregnancy have found or reported no significant differences in the ethnicity of the abused due to primarily Caucasian or African American samples (Schei, et al., 1991; Stewert & Cecutti, 1993). McFarlane, et al. (1992) using an ethnically diverse population found the prevalence of abuse to be equivalent among white non-Hispanic and African Americans (19%), but a significantly lower prevalence in the Hispanic Americans (14%). Another study found that the prevalence of abuse was 3.5 times higher among white non-Hispanic women than it was among Hispanic women, and 1.6 times higher among white non-Hispanic than among black women in a predominantly white non-Hispanic population (Berenson, et al., 1991). The Abuse Victim Study (1994) reported that the victims of abuse were predominantly white non-Hispanic (52%), followed by black non-Hispanic (30%), Hispanic (9%) and other (9%).

This study a predominantly white non-Hispanic population found that the prevalence of physical abuse was greatest among Hispanic women (31.25%), followed by American Indian, Asian or Pacific Island women (20%), black non-Hispanic women (13.2%), and white non-Hispanic women (6.25%). However, it is important to note that abuse does occur in

all ethnicities and that it is not acceptable behavior in any ethnic group.

The Abuse Victim Study (1994) found the ages of the abused were as follows: 16-20 (18%), 21-25 (39%), 26-30 (24%), 31-35 (13%), 36 and older (6%). They also reported that the ages of the offenders were as follows: 18-20 (11%), 21-25 (38%), 26-30 (28%), 31-35 (15%) 36 and older (8%). This study found that the ages of the abused participants were as follows: 16-20 (42%), 21-25 (36%), 26-30 (18%), 31-35 (4%), 36 and older (0%). It was also found that the ages of the offenders were as follows: 18-20 (14%), 21-25 (52%), 26-30 (14%), 31-35 (14%) 36 and older (5%). Similar age comparisons in other studies were found to be not significant (Berenson, et al., 1991 ; Campbell, et al., 1993; Schei, et al., 1991). However, other studies have substantiated the findings of this survey that the younger a woman's age the greater is her risk for being abused (Parker, et al., 1994; Parker, et al., 1993; Stewert, et al. 1993).

Research Question Four

The fourth research question asked: Is there a relationship between depressive symptomatology and self-reported abuse among pregnant women in military health care? From the power level of .99 and the Cronbach alpha coefficient (.87) obtained, the BDI shows a high level of internal reliability in the study population.

The level of depressive symptomatology for the non abused participants was as follows: none or minimal 70%, mild 20%, moderate 7%, and severe 3%. The level of depressive symptomatology for the abused participants was as follows: none or minimal 43%, mild 43%, moderate 10%, and severe 4%. The groups are similar in the moderate and severe levels of depressive symptomatology, but differ greatly in the minimal and mild levels of depressive symptomatology. A higher portion of abused women reported mild levels of depressive symptomatology.

Several studies have focused on maternal psychological characteristics and attitudes as factors related to depressive symptomatology during the perinatal period (Kumar & Robson, 1984; Unterman, Posner, & Williams, 1990; Watson, Elliott, Rugg, & Brough, 1984). However, it is important to consider that stressful socioenvironmental factors such as domestic violence may be more significant determinants of depressive symptomatology in pregnancy. Stressful life events such as domestic violence have been consistently associated with depressive symptomatology during pregnancy (Seguin, Potvin, St. Denis, & Loiselle, 1995).

Depressive symptoms have also been significantly associated with adverse health behaviors in pregnancy such as low weight gain and the increased use of alcohol, cocaine, and cigarettes (Zuckerman, Amaro, Bauchner, and Cabral, 1989). These poor health behaviors can result in intrauterine growth retardation, preterm birth, and low

birth weight infants (Steer, Scholl, Hediger, & Fischer, 1992).

Evaluation of Methods

The primary purpose of this pilot study was to test methods to document the self-report of abuse. The Women's Pregnancy Well-Being Assessment Survey was developed by the investigator using three existing measures of abuse, depression, and self-esteem: the Abuse Assessment Screen (AAS), the Beck's Depression Inventory (BDI), and the Rosenberg Self-Esteem Scale (RSE). Only the AAS and the RSE were used to answer the questions proposed by this study. Also, the survey included 19 questions deemed appropriate for background and sociodemographic information based on the researcher's knowledge of the patient population and domestic violence.

The one page two-sided survey was designed to elicit pertinent information in a brief time frame. The majority of the participants completed the survey in approximately 10 to 15 minutes. No problems were identified on the RSE or the BDI portion of the survey. However, suggestions for the sociodemographic portion and AAS were identified. First, the questions should use multiple response answers rather than fill-in-the-blank responses. For example, the question "How long have you been with your partner?" the participant would circle the response which applied: less than one

year, one to two years, three to five years, six to ten years, or greater than 10 years. This modification will provide greater ease of administration and improve quality of responses. Second, recommendations were made to modify one question and add another questions to the sociodemographics portion:

1. Were you abused in your family of origin? Yes or No
If YES, was the abuse: Emotional, Physical, or Sexual
2. Would it bother you or offend you if a health care provider inquired about abuse in your relationship?
Yes or No

Also, expand the AAS to include five questions instead of three question AAS. This will provide more comprehensive information on the abused sample. Additionally, it will allow the researcher to assess for abuse beyond a one year interval. Finally, enlarge the body map on the AAS.

Although not written into the initial research proposal, a qualitative component was added during the course of the research. While soliciting subjects for participation in the research, many women began to openly share stories with the researcher. A few spoke of their immediate relationship, in which they were being assisted by Family Advocacy. Others spoke of violence in past relationships or families of origin. Many had friends, family, or neighbors

in abusive relationships. Some spoke of experiences while volunteering in women's shelters. The researcher discovered that most women were eager to respond to the subject of domestic violence if given the opportunity. Therefore, it was recommended that the Women's Pregnancy Well-Being Assessment Survey be expanded to provide a section for participants to document their thoughts and feelings on the subject of domestic violence.

Eliciting study participation varied depending on the individual clinic routine. The prenatal patients were approached about participating in the study at a point in the appointment process when they were not in the presence of their male significant other. Originally, the researcher believed the best opportunity would be at the weights, measures, and urine screening station. This proved to be difficult at the Bethesda, site due to the large clinic volume. Approaching at this point appeared to significantly delay the appointment process. Instead, the patients were approached in the exam rooms prior to appointment or upon leaving their appointments. At the Dover site, the researcher was provided a room to approach patients and conduct surveys. Although this would be the most ideal scenario, it is not always the most feasible. Regardless of the approach used, 7 of 28 women self-reporting abuse were accompanied to their appointments by their male significant others. These findings suggest that there is a window of opportunity to interview women during the appointment

process and that they will self-report abuse even if accompanied to their appointment.

The prevalence of abuse obtained in this study was comparable to studies conducted in the civilian community (Amaro, et al., 1990; Anderson, et al., 1986; Bullock et al., 1992; Gelles, 1975; Helton, 1986; Helton, et al., 1987a, 1987b; Helton & Snodgrass, 1987; McFarlane, 1991; McFarlane, et al., 1992; Parker, et al., 1994; Stewart, et al., 1993). Also, this study is similar to earlier findings that establish a significant relationship between depressive symptomatology and abuse (Campbell, et al., 1992; Cascardi, et al., 1992; Gleason, 1993; McClennan, et al., 1994; Sato & Heiby, 1992; Torres, 1992. These finding to some degree validate the effectiveness of the Women's Well-Being Assessment Survey.

Implications for Nursing

Although a pilot study, the findings are comparable to those found in similar studies. The implications are straightforward and clear, we can no longer be passive in our practices of providing health care to pregnant women. We must take a proactive/preventive approach rather than a reactive one. The findings of this study lend support for the development of a standard of care as a proactive approach to domestic violence which would provide a description of the process that health care providers should use in rendering care to the abused woman. A standard of care for domestic violence would improve the quality of

perinatal care to abused women, helping health care providers to make correct decisions and recommendations to patients about the appropriate steps to take in their situation. This in turn could reduce the number of poor outcomes caused by a lack of or substandard care of the abused perinatal woman and her family (Fiesta, 1993).

Two aspects that are vital components of the standard of care are routine screening for domestic violence and distribution of information regarding local services (civilian and military) available to all perinatal women. The need for the distribution of pertinent information regarding domestic violence was reinforced in this study, nearly 36% of the participants were unaware of domestic violence services available. In the military health care setting all medical personnel (including nurses) are subject to a hospital newcomers briefing. This briefing would provide an ample opportunity to educate those who provide care not only on the issue of domestic violence but also on the importance of routine screening and information on the resources available (military and civilian).

As health care providers we must bring to the forefront the prevalence of abuse in pregnant women, we can no longer pretend that it does not exist. King, et al. (1993) state that assessment techniques and the exposure of abuse are essential strategies to prevent and minimize the severity of abuse. The purpose of establishing a standard of care is to identify abused women through the routine use of screening

questions, expose the reality of abuse, and to provide appropriate intervention and referral. A guideline of care is also necessary in order to comply with the Joint Commission on the Accreditation of Hospital Organizations (JCAHO) standards which have mandated the compliance of standards relating to the care of victims of spousal abuse; the provision of training for health care providers regarding identification, documentation, treatment, and referral procedures; and mandate the ongoing training of key personnel. "Appropriate care cannot not be provided unless suspected or alleged victims are identified and assessed (JCAHO, 1992, p. 42).

The conceptual framework of this study allows for an increased understanding and awareness of domestic violence through Walker's (1979) cycle of violence. Orem's self-care deficit theory can be used as a basis for appropriate holistic care of the abused woman including assessment and intervention. Nursing systems can be used to assess and appropriately intervene not only with the physical outcomes of abuse, but also the psychological outcomes of abuse. Grief theory helps to explain the depressive symptomatology that may be associated with abuse as it relates to the loss of the idealized relationship. Orem's supportive-educative and in some instances the partly compensatory nursing systems can be proactively utilized to overcome self-care limitations and promote optimal self-care for the abused woman.

Associated Health Risks

Domestic violence prior to (within the last year) and during pregnancy has been proven to occur with sufficient frequency that it poses major health implications for the pregnant woman and her fetus (Bullock, et al., 1989; Newberger et al., 1992). Campbell (1986) reported that pregnancy was associated with an increased severity and frequency of abuse, and a factor for an increased risk of homicide. Research shows an increased risk of miscarriages, premature births, and low-birth-weight infants in abused women (Bullock & McFarlane, 1989; Greenberg, 1994). Campbell et al. (1992) and Parker, et al. (1994) found a lack of prenatal care or late entry to prenatal care associated with the abused pregnant woman.

In initiating the first building blocks of comprehensive management of abuse nurses must be prepared to deal with all of the possible ramifications that the identification of abused perinatal women will bring. This may include, but is not limited to discovering a level and severity of abuse that is uncomfortable to acknowledge, or to believe is possible. It may also awaken feelings of guilt for all those women whose abuse has been ignored in the past. Developing more resources may be needed. If this is required, the initial impetus may fall on the shoulders of health care providers, particularly nurses.

Education of Health Care Providers

Education must come before the enactment of a standard of care. If there is not an understanding of the rationale for the change in clinical practice to incorporate routine abuse assessment screening, written guidelines will be ineffective. Health care providers must be made fully aware of the prevalence of abuse in the perinatal period and its relationship to poor perinatal outcomes. Health care providers must also be cognizant of the correlated health risks to both mother and infant. An educational program will increase the awareness of health care providers and enable them to dispel societal and personal myths concerning abuse, therefore, leading them to routinely incorporate abuse assessment screening in their clinical practice and to mobilize appropriate resources for women.

Recommendations for Future Research

In this preliminary military sample, domestic violence does exist. Additionally there were differences in the abused and nonabused sample with respect to marital status, race, and military rank. Finally a significant relationship between abuse and depressive symptomatology exists. Limitations of this pilot study included convenience sampling, small sample size, and recall bias. In light of this information, the results of this must not be

generalized to the global military population. Based on the findings of this study, the following recommendations are offered:

1. Replicate the study using additional sites and a larger sample size.
2. Replicate the study pursuing alternative methods (interview format) of data collection in conjunction with survey method.
3. Expand sampling criteria to include postpartum patients as well as prenatal patients.
4. Modify the sociodemographic portion of the Women's Pregnancy Well-Being Assessment Survey. Allow participants to indicate answers by circling as opposed to filling in the blank. This will provide greater ease of administration and improve quality of responses.
5. Expand the AAS to include five questions instead of three. This will provide more comprehensive information on the abused sample. Additionally, it will allow the researcher to assess for abuse beyond a one year interval.
6. Provide a qualitative area on the Women's Pregnancy Well-Being Assessment Survey for comments, suggestions, thoughts, and feelings. Many women were very willing to share stories or thoughts about domestic violence.
7. Design research strategies that will protect women,

yet systematically discover the nature and extent of abuse and its impact on perinatal outcomes.

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APPENDIX A

ABUSE ASSESSMENT SCREEN APPROVAL

Loretta J. Cepis, Major, USAF, NC

PII Redacted

1 August 1995

Judith McFarlane, RN, DrPH, FAAN
 Texas Woman's University, College of Nursing
 1130 M. D. Anderson Boulevard
 Houston, TX 77030

Dear Dr. McFarlane:

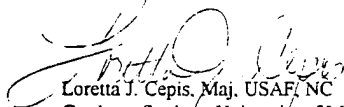
As graduate nursing students at the University of Maryland at Baltimore, myself along with Navy Lieutenant Beth W. Gering are requesting permission to utilize the Abuse Assessment Screen (3-item abuse focus questionnaire) as part of our assessment survey in collecting data for our theses.

A preliminary descriptive pilot study will be performed at three military hospital clinics in order to investigate the incidence of domestic violence prenatally and its relationship to depression and self-esteem. Although studies pertaining to this subject matter have been conducted in the civilian community, thus far no (published) studies have been conducted in the military population. A Women's Well-Being Assessment Survey will be distributed to prenatal patients at these facilities from approximately 18 September to 30 December 1995, or until a sample size of 500 participants is obtained.

Enclosed you will find a draft copy of our proposed survey. We respectfully request your consent to incorporate the Abuse Assessment Screen (3-item) as part of our survey. If you have any further questions I can be reached at (410) 381-6752 or at my home address. Thank you for your assistance.

We were excited to see that you will be presenting at the AWHONN Armed Forces District Conference at San Diego in October, Lt. Gering is looking forward to meeting you in person, unfortunately I will not be able to attend.

Sincerely,



Loretta J. Cepis, Maj. USAF, NC
 Graduate Student, University of Maryland at Baltimore

Enclosure: 1

8-10-95

Loretta, You certainly have my permission to use the AAS; however, I only recommend the instrument to be as intended - in a personal nurse-patient interview in a private safe confidential setting. It is unsafe to ask women to complete the instrument as a survey tool. Please *Judy* consider these safety issues carefully. *McFarlane*

APPENDIX B

WOMEN'S PREGNANCY WELL-BEING ASSESSMENT SURVEY

WOMEN'S PREGNANCY WELL-BEING ASSESSMENT SURVEY

Please answer the following questions as best you can

How many times have you been pregnant? _____ Living children? _____

How far along are you in your pregnancy? _____

MARTIAL STATUS: Married Single Never married Separated Divorce

AGE: (self) _____ (partner) _____

RACE: (circle) (self) American Indian or Alaska Native Asian or Pacific Islander Black, not of Hispanic origin Hispanic White, not of Hispanic origin (partner) American Indian or Alaska Native Asian or Pacific Islander Black, not of Hispanic origin Hispanic White, not of Hispanic origin

Are you a U.S. Citizen? YES NO If you answered NO, what country are you from _____

RANK/GRADE: (self) _____ (partner) _____

BRANCH OF SERVICE: (self) _____ (partner) _____

How long have you been with your current partner? _____ Is your current partner the baby's father? YES NO

YOUR HIGHEST LEVEL OF EDUCATION: Some High School High School Graduate Some College College Degree Graduate Degree

If you are a dependent do you work outside the home? YES NO

How long have you lived at your current duty station? _____ Do you live on base YES NO

How many times have you or your partner been separated due to the military (e. g. deployment) in the last three years? _____ Total months separation? _____

Do you have supportive family members or close friends who live in the local area (within 100 miles)? YES NO

Do you have friends or peers within your community (military) who you suspect are abused by their significant other? YES NO

Were you ever a victim of abuse in your family of origin? YES NO

Prior to today, were you aware of abuse services in your local community? YES NO

Did your significant other accompany you to your prenatal appointment today? YES NO

Abuse Assessment Screen
(Circle YES or NO for each question)

Within the last year, have you been hit, slapped, kicked, or otherwise physically hurt by someone? YES NO

If YES, by whom (circle all that apply) Husband Ex-husband Boyfriend Stranger Other Multiple

Total number of times _____

Since you've been pregnant, have you been hit, slapped, kicked, or otherwise physically hurt by someone? YES NO

If YES, by whom (circle all that apply) Husband Ex-husband Boyfriend Stranger Other Multiple

Total number of times _____

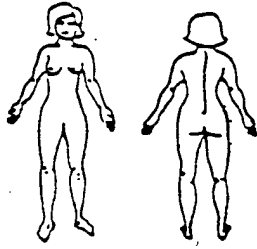
Mark (with an X) the area of injury on the body map then place a score next to each incident according to the following scale:

1= Threats of abuse including the use of a weapon
2= Slapping, pushing, no injuries of lasting pain
3= Punching, kicking, bruises, cuts and/or lasting pain
4= Beating up, severe contusions, burns, broken bones
5= Head injury, internal injury, permanent injury
6= Use of a weapon; wound from weapon

(If any of the descriptions for the higher number apply, use the higher number)

Within the last year, has anyone forced you to have sexual activities? YES NO

If YES who (circle all that apply) Husband Ex-husband Boyfriend Stranger Other Multiple



On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describe the way you have been feeling in the **PAST WEEK, INCLUDING TODAY!** Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. 3 I have no appetite at all anymore.
2 My appetite is much worse now.
1 My appetite is not as good as it used to be.
0 My appetite is no worse than usual.</p> <p>2. 3 I feel that the future is hopeless and that things cannot improve.
2 I feel I have nothing to look forward to.
1 I feel discouraged about the future.
0 I am not particularly pessimistic or discouraged about the future.</p> <p>3. 3 I feel I am a complete failure as a person (parent, parent, partner, wife).
2 As I look back on my life, all I can see is a lot of failures.
1 I feel I have failed more than the average person.
0 I do not feel like a failure.</p> <p>4. 3 I am dissatisfied with everything.
2 I don't get satisfaction out of anything anymore.
1 I don't enjoy things the way I used to.
0 I am not particularly dissatisfied.</p> <p>5. 3 I feel as though I am very bad or worthless.
2 I feel quite guilty.
1 I feel bad or unworthy a good part of the time.
0 I don't feel particularly guilty.</p> <p>6. 3 I hate myself.
2 I am disgusted with myself.
1 I am disappointed in myself.
0 I don't feel disappointed in myself.</p> <p>7. 3 I get too tired to do anything.
2 I get tired from doing anything.
1 I get tired more easily than I used to.
0 I don't get any more tired than usual.</p> | <p>8. 3 I have lost all of my interest in other people and don't care about them at all.
2 I have lost most of my interest in other people and have little feeling for them.
1 I am less interested in other people than I used to be.
0 I have not lost interest in other people.</p> <p>9. 3 I can't make any decisions at all anymore.
2 I have great difficulty in making decisions.
1 I try to put off making decisions.
0 I make decisions about as well as ever.</p> <p>10. 3 I feel that I am ugly or repulsive-looking.
2 I feel that there are permanent changes in my appearance and they make look unattractive.
1 I am worried that I am looking old or unattractive.
0 I don't feel that I look any worse than I used to.</p> <p>11. 3 I can't do any work at all.
2 I have to push myself very hard to do anything.
1 It takes extra effort to get started at doing something.
0 I can work about as well as before.</p> <p>12. 3 I would kill myself if I had a chance.
2 I have definite plans about committing suicide.
1 I feel I would be better off dead.
0 I don't have any thoughts of harming myself.</p> <p>13. 3 I am so sad or unhappy that I can't stand it.
2 I am blue or sad all the time and I can't snap out of it.
1 I feel sad or blue.
0 I do not feel sad.</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Used with permission of Aaron T. Beck, M.D.

Read the statements below. Circle the answer that **BEST** expresses/describes your feelings about the statement.

	SA= STRONGLY AGREE	A=AGREE	D=DISAGREE	SD=STRONGLY DISAGREE
1. I feel that I am a person of worth, at least on equal basis with others.	SA	A	D	SD
2. I feel that I have a number of good qualities.	SA	A	D	SD
3. All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
4. I am able to do things as well as most other people.	SA	A	D	SD
5. I feel I do not have much to be proud of.	SA	A	D	SD
6. I take a positive attitude toward myself.	SA	A	D	SD
7. On the whole, I am satisfied with myself.	SA	A	D	SD
8. I wish I could have more respect for myself.	SA	A	D	SD
9. I certainly feel useless at times.	SA	A	D	SD
10. At times I think I am not good at all.	SA	A	D	SD

APPENDIX C

UNIVERSITY OF MARYLAND INSTITUTIONAL REVIEW BOARD

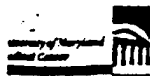
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410-312-2743

APPROVAL

EDS

P-12 01

UNIVERSITY OF MARYLAND
SCHOOL OF MEDICINE

655 West Baltimore Street, Room 14-016
Baltimore, Maryland 21201-1559
410 328-5037
410 328-1565

OFFICE OF THE DEAN
Institutional Review Board
Institutional Animal Care and
Use Committee

MEMORANDUM

TO: Loretta Caple, Principal Investigator

FROM: UMAB Institutional Review Board (IRB)
Assurance Number M1174-01NR

RE: "Women's Pregnancy Well-Being"

DATE: June 29, 1985

The above-referenced project has been reviewed and determined to be exempt from the IRB approval process according to the Department of Health and Human Services Office for Protection from Research Risks Code of Federal Regulations 45 CFR 46.101.b (2).

If the protocol is altered in any way, it must be reviewed by the IRB.

Please keep a copy of this letter for future reference. If you have any questions, please do not hesitate to contact the IRB Office at (410) 706-5037.

Robert R. Conley, MD, Chairman
Institutional Review Board

CC: IRB Exemption File

APPENDIX D
NATIONAL NAVAL MEDICAL CENTER CLINICAL INVESTIGATION
DEPARTMENT APPROVAL



DEPARTMENT OF THE NAVY
BUREAU OF NAVAL PERSONNEL
WASHINGTON, D.C. 20370-5000

3900
Ser 00H/5U580642
18 Oct 95

From: Bureau of Naval Personnel (PERS-00H)
To: LT Beth Gering (NNMC Code 10I)

Subj: NAVY PERSONNEL SURVEY APPROVAL

Ref: (a) Your ltr 6500 Ser 10I/0040 of 16 Oct 95
(2) OPNAVINST 5300.8A

1. Your request in reference (a) of survey approval for Clinical Investigation Research Program #B95-074, "Domestic Violence in Pregnancy within a military population" is approved. Per reference (b) your survey is assigned OPNAV Report Control Symbol: OPNAV 6500-2. This control symbol should be displayed in the Privacy Act Statement of your survey. Your license to administer this survey expires on 30 September 1996.

2. Upon completion of your survey, please submit the following to: Navy Personnel Survey System, Navy Personnel Research and Development Center, San Diego, CA 92152-6800:

- a. Variable coding guide (if responses are scored or recoded)
- b. An ASCII version of your raw data on a floppy disk
- c. A file layout guide locating each variable on the file
- d. Your final report, thesis, or dissertation

3. The Navy Personnel Research and Development Center (NPRDC) point of contact for surveys is Dr. John Kantor (Code 12), (619) 553-7641.

C. W. MCPeters
C. W. MCPETERS
Special Assistant for
Research Management

Copy to:
NPRDC (NPSS, Code 12)

APPENDIX E

DOVER AIR FORCE BASE HOSPITAL APPROVAL

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 436TH AIRLIFT WING (AMC)

MEMORANDUM FOR MAJ LORETTA J. CEPIS

14 Aug 95

PII Redacted

FROM: 436th Medical Group/CC
307 Tuskegee Blvd
Dover AFB DE 19902-7307

SUBJECT: Approval for survey to be conducted at 436th Medical group, Dover AFB DE

Permission is granted for you to gather data via survey of the pregnant women at Dover AFB DE. We understand the subject is "Domestic Violence in Pregnancy". Having read the material enclosed and understanding that the survey is voluntary for our patients we will provide the survey to our pregnant ladies. This is with the understanding that you obtain permission through the Air Force Survey Agency at Randolph AFB, TX.

ROBERT C. PARKE, COL, USAF, MC, FS
Commander

APPENDIX F

MEMORANDUM OF UNDERSTANDING

6500
Ser 10I/0138
20 Nov 95

From: Head, Clinical Investigation Department
To: CDR N. Payonk, NC, USN, Obstetrics & Gynecology Department
Subj: EXECUTION OF MEMORANDUM OF UNDERSTANDING (MOU) FOR CIP
RESEARCH PROJECT #B95-074, "DOMESTIC VIOLENCE IN PREGNANCY WITHIN
A MILITARY POPULATION"

Ref: (a) CMDR, NNMC ltr 6500 Ser 10I/052 of 6 Nov 95

Encl: (1) Executed Memorandum of Understanding (MOU) between
National Naval Medical Center (NNMC), Dover Air Force Base
(DAFB)

1. Congratulations! Per reference (a) the MOU between NNMC and DAFB has been signed. You may now begin your research.
2. Your official project # is CIP B95-074. Use this number on any correspondence about your project. This will expedite the processing of your requests.
3. The Director, Resource Management maintains the original MOU, however, enclosure (1) is provided to you. Please note the expiration date of the MOU. The Clinical Investigation Department (CID) will forward the executed MOU in support of your study to Naval School of Health Sciences (NSHS). You must notify CID of any proposed changes in your study that might affect the MOU, (ie, increase of study duration, changes in any costs or services) so that the Resource Management Directorate can process any amendments to the MOU.
4. If you have any questions, please contact the CID staff at 295-2275.


A. HARRIS, Ph.D.

Copy to:
#B95-074 (COR)

APPENDIX G

PATIENT INFORMATION COVERSHEET (BETHESDA)

Patient Information Sheet and Consent for Voluntary Participation
in a Clinical Investigation Study

1. I have been asked to voluntarily participate in research entitled "Domestic Violence in Pregnancy in a Military Population and its Relationship to Depression and Self-Esteem" being conducted at National Naval Medical Center, Bethesda, MD and Dover Air Force Base Hospital, DE.
2. The purpose of this research is to determine the prevalence of domestic violence in pregnancy in the military community and its relationship to depression and self-esteem.
3. I understand the procedure involves filling out a survey, which should take 10 to 15 minutes to complete.
4. A total of 500 subjects are expected to participate in this study.
5. **Risks and Discomforts:** I understand that some of the questions are very personal and sensitive in nature. I may feel uncomfortable about disclosing/sharing some of these experiences, but that it is important to be honest. I understand and accept these risks.
6. I understand that the research may or may not help me personally, but that the results may help the investigators gain important knowledge about domestic violence in pregnancy within the military community. Participating in this study will assist the investigators to identify appropriate programs and effective resources for women experiencing domestic violence within the military sector.
7. I understand that this project is not designed to treat any medical condition that I may have, therefore there is no alternative procedure or course of treatment that would be advantageous to me.
8. I understand that it is the investigators' goal to protect my identity to the maximum extent possible. All responses that I provide in this survey will remain confidential and anonymous. The completed surveys will be available only to the investigators and they will not be available to anyone in this facility. My responses will not be reviewed until all the surveys have been collected.
9. If I suffer any injury as a result of my participation in this study, immediate medical treatment is available at military treatment facilities or family advocacy. I understand that although no compensation is available, any injury as a result of my participation will be evaluated and treated in keeping with the benefits or care to which I am entitled under applicable regulations.

See other side

10. If I have any questions regarding this research project, I may contact LT Gering at (703) 978-2370. If I have any questions regarding my rights as an individual while participating in the research project, I can contact one of the Research Administrators, Clinical Investigations Department, at (301) 295-2275. They will answer my questions or refer me to a member of the Committee for Protection of Human Subjects for information. If I have been injured as a result of this project I may call the legal office (301) 295-2215.

11. I understand that my participation in this project is voluntary and that my refusal to participate will involve no penalty or loss of benefits to which I am entitled under applicable regulations. If I choose to participate, I am free to ask questions. Also, if I feel uncomfortable while filling out the survey and desire to stop, I can seal the uncompleted survey in the provided envelope and return it to the witness/locked box.

12. The investigator may terminate my participation in this project for the following reasons: If the participant is too overwhelmed to complete the survey.

13. I have been informed that there will not be any additional costs to me if I choose to participate in this study.

The researchers want to ensure that you fully understand the study and that the proper documentation of your agreement to participate is obtained, however your signature is **NOT REQUIRED!** Instead, if you understand the study and agree to participate please circle yes and a staff member not associated with the study will witness your agreement.

I understand the nature of the proposed study, the risks, and benefits involved, as described above and hereby request to participate in this study

YES NO

This is my first time completing this survey

YES NO

Signature of the Witness

INSTRUCTIONS:

The number on the consent form and survey is intended to insure the researchers that for every survey there is a witnessed consent. We have no way of identifying you from these numbers. In order to maintain your privacy, please complete this survey **BEFORE** returning to the waiting room. Finally, seal the survey in the provided envelope and return it to the witness/locked box whether or not you choose to complete this survey.

If you have any concerns or do need assistance we **STRONGLY ENCOURAGE** you to share your concerns with your health care provider. We have provided you with a resource card which contains national and local hot line numbers if you would like information on domestic violence or depression.

APPENDIX H

PATIENT INFORMATION COVERSHEET (DOVER)

Patient Information Sheet

As military nurses who are enrolled in graduate school at the University of Maryland at Baltimore, we are conducting a survey on the well-being of pregnant in the military population. A total of 500 women are expected to participate in this study. Our purpose is to determine the prevalence of domestic violence in the military community and its relationship to depression and self-esteem. Filling out this survey will help us to better understand your needs and help us to better serve the pregnant women receiving care in military hospital clinics. We realize that your time is valuable so we have designed this survey to gather as much information as possible without taking up too much of your time. The survey should take approximately 10 to 15 minutes to complete.

It is our goal to protect your identity to the **MAXIMUM** extent possible! All responses that you provide in this survey will remain anonymous. The completed surveys will be available only to the researchers, they will not be available to anyone in this facility. Your responses will not be reviewed until all surveys are collected. To maintain your privacy, please seal the survey in the provided envelope and return it to the designated collector or the locked survey box whether or not you choose to complete this survey.

Some questions are very personal and sensitive in nature. You may feel uncomfortable about disclosing/sharing some of these experiences, but it is important to be honest. Completing this survey will help us to identify needed programs in the military and provide you and your community with appropriate and effective resources should you need them.

Thank you very much for participating in this survey. Participation in this study is **VOLUNTARY**! By completing this survey, you have given your consent to participate. Refusal to participate will involve no penalty or loss of benefits to which you are entitled. If you have any concerns or do need assistance we encourage you to share your concerns with your health care provider. We have provided national and local hot line numbers if you would like more information on domestic violence or depression.

I understand the nature of the proposed study, the risks and benefits involved as described above and hereby request to participate in the study

YES NO

This is my first time completing this survey

YES NO

Witness _____

APPENDIX I

BECK DEPRESSION INVENTORY APPROVAL



UNIVERSITY OF
PENNSYLVANIA
MEDICAL CENTER

University of Pennsylvania School of Medicine
Hospital of the University of Pennsylvania

Psychopathology Research Unit
Department of Psychiatry

Dear Ms. Repis

On behalf of Aaron T. Beck, M.D., I am responding to your recent inquiry regarding our research scales.

You have Dr. Beck's permission to use and reproduce the scale(s) checked below only for the designated research project that you described in your letter. There is no charge for this permission.

However, in exchange for this permission, please provide Dr. Beck with a complimentary copy of any reports, preprints, or publications you prepare in which our materials are used. These will be catalogued in our central library to serve as a resource for other researchers and clinicians.

- | | |
|-----------------------------------------------------------|------------------------------------------------------------------------|
| <input type="checkbox"/> Beck Depression Inventory (BDI) | <input type="checkbox"/> Weekly Activity Schedule (WAS) |
| <input type="checkbox"/> Beck Anxiety Inventory (BAI) | <input type="checkbox"/> Daily Record of Dysfunctional Thoughts (DRDT) |
| <input type="checkbox"/> Hopelessness Scale (HS) | <input type="checkbox"/> Patient's Guide to Cognitive Therapy (PGCT) |
| <input type="checkbox"/> Suicide Intent Scale (SIS) | <input type="checkbox"/> Patient's Report of Therapy Session (PRTS) |
| <input type="checkbox"/> Scale for Suicide Ideation (SSI) | <input type="checkbox"/> Anxiety Checklist (ACL) |
| <input type="checkbox"/> Cognitive Checklist (CCL) | <input type="checkbox"/> Beck Self-Concept (BSCT) |
| <input type="checkbox"/> Sociotropy-Autonomy Scale (SAS) | <input type="checkbox"/> Dysfunctional Attitude Scale (DAS) |
| <input type="checkbox"/> Other _____ | |

If you have any further questions, feel free to contact me.

Sincerely,

Katherine Dahlsgaard
Katherine Dahlsgaard
Research Assistant to Aaron T. Beck, M.D.

NOTE: Permission for inclusion of the BDI, BAI, HS, SSI, and BSCT in any publication must be obtained from The Psychological Corporation; telephone # 1-800-223-0752.